SARATOGA LAKE VERSUS THE HUDSON RIVER: VOTER PREFERENCES FOR THE FUTURE SARATOGA SPRINGS DRINKING WATER SOURCE

By

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ABSTRACT

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In recent years a heated debate had developed in Saratoga Springs, NY over what to use as a new drinking water source. Currently, two options are being considered, Saratoga Lake and the Hudson River. Proponents of each source have attempted to gain voter support for their preferred supply. This paper presents the findings of a public opinion poll conducted over May and April of 2007, which surveyed 313 voters living in Saratoga Springs. The objective of the poll was to uncover what source voters' favor and to better understand the factors influencing these preferences. It was found that 47 percent of participants prefer Saratoga Lake, while only 28 percent favor the Hudson River. The factors that significantly influence public opinion on this matter are: 1. Partisanship and Issue-framing, 3. Length of Residency, 4. Recreational Habits, and 4. Environmental Attitude. The study showed that the majority of people favor Saratoga Lake because they feel it is less expensive and of higher quality water. In order to gain voter support we recommend that leaders focus discussions first on project cost and water quality, and secondly on access to recreation, maintained local control, reduction of development, and environmental benefits of each source.

Introduction

The New Year brought with it a rising controversy in the city of Malta, New York, as Advanced Micro Devices (AMD), a microchip fabrication plant, made public their plans for developing a $3.2 billion facility in Malta's Luther Forest Technology Campus (Post 2007). While this would provide the area with thousands of high-paying jobs, the development also brings an increased need for certain resources, most notably water (Reinert 2007). This controversy represents greater concerns which townships throughout Saratoga County are facing; Saratoga Springs is no different. In a city world renowned for its water resources, worrying about the availability of clean drinking water seems almost laughable. However, it is a reality. As Saratoga Springs faces population and industrial growth, the sustainability of the city's current drinking water sources, Loughberry Lake, Bog Meadow Brook, and the Geyser Crest Well Field has been called into question (Marks and Bergelin 2006).

In recent years a heated debated has unfolded, drawing to question whether Saratoga Springs should look towards using Saratoga Lake or the Hudson River as a new drinking water source. This contentious issue has been central to candidates' platforms during the past two city council races, with Democrats championing the choice of Saratoga Lake and Republican candidates advocating for the Hudson River. While this issue has been an integral part of candidates' platforms, challengers and incumbents are not the only ones deeply invested in the final decision. Previous studies reveal drinking water as issue on the minds of Saratoga Springs residents (Hyers 2005). However, while the stances of elected officials' are clear, prior to the commencement of this project there had been no formal research conducted to examine the opinion of the electorate regarding their preferred future source for the city's drinking water.

This project aims to quantify not only public opinion as to whether Saratoga Lake or the Hudson River should be selected, but also to better understand the variables informing these viewpoints. Specifically, we will examine the role political affiliation, access to information, issue-framing by political leaders, environmental ethos, use and value of Saratoga Lake, length of residency in the city, age, gender, socioeconomic bracket and education play in informing citizens' voting decisions. The ultimate goal of this research is to understand the Saratoga Springs water debate as a local case study within a broader theoretical context. By dissecting public environmental opinion and the willingness (or unwillingness) of the Saratoga Springs population to prioritize the preservation of the environment over other interests, our hope is to recognize and examine the weight of environmental issues in the political decisions of this local population. There are potentially broad implications for this study, providing insight into the political salience of the environment at a far more local level than current research exposes.

Methods

In order to identify what people think and which issues shape and inform public opinion, a 22 question quantitative survey was created, integrating influential issues with questions focused on larger environmental attitudes and specific water resource preference. The structured format was favored, as this procedure reduces the chance of error by standardizing the questions asked and regulating consistent behaviors towards interviewees (Singleton and Straights 1999). More specifically, a phone survey was chosen because it allows for standardized pre-testing, question development, interviewer training and supervision, sampling, data coding, and entry (Singleton and Straights 1999). Due to time constraints and willingness of participants, it would be impossible to survey the registered voter population of Saratoga Springs in its entirety; the best available option was to gather a sample size representative of the larger group. Therefore, it was necessary to standardize the

questions asked in order to standardize the responses gathered, ultimately providing us with a quantifiable set of data for analysis.

A list of 9,638 registered voters within the city of Saratoga Springs was acquired from the Saratoga County Board of Elections. This list included only those residents who had provided a phone number at the time of registration. To ensure a truly representative and randomized sample, it was necessary to avoid built in biases. The first step then was to randomize the list of phone numbers using Microsoft Excel. Additionally, time of day was accounted for when making phone calls since specific populations tend to be available at home during varying times of the day. In order to avoid a sample population with certain demographics over or underrepresented, phone calls were made from early afternoon around 11 AM until early evening around 8 PM, Monday through Sunday. This allowed exposure to respondents from all populations, including working parents, unemployed, retired, college students, and the elderly. If a phone line was busy, or the caller received an answering machine, calling protocol required each phone number to be called up to three times before it was crossed off the list, each of these three calls preferably spaced out at different times of the day.

Question format was supplied by the Yale Center for Environmental Law and Policy 2004 and 2005 public opinion polls on the environment, Associate Professor of Political Science at University of Vermont, Deborah Guber's, The Grassroots of a Green Revolution: Polling America on the Environment and "Voting Preferences and the Environment in the American Electorate," Skidmore student Eric Hyers's 2006 government thesis, and Caroline Bergelin and Jenn Marks' Skidmore College environmental studies capstone project. Karen Kellogg and Michael Ennis-McMillan's 2005 Water Resource Initiative (WRI) research informed the specific themes of our questions, focusing questions 3-9 on project cost, water quality, local control, impact on development, and preservation for recreation. Additionally, a meeting with sociologist Bill Fox provided insight into the structuring of individual questions, as well as, the optimal order in which to ask them. His suggestions

led to placing sensitive questions about partisan affiliation and income brackets at the end of the survey, in order to minimize refusal of participation (Fox 2007). While the majority of the survey questions were pulled from previously mentioned resources, Professor Fox provided the tools for structuring questions in such a manner as to make it easy for respondents to not only understand the question at hand, but also to enhance their willingness to provide a response.

After basic introduction questions (questions 1-2), the questions can be grouped into four major categories. The first of which includes those that focus on issue salience (questions 3-9), followed by knowledge of the Saratoga Springs water controversy (questions 10-12), environmental concerns and beliefs (questions 13-16), and demographics (questions 16-21). All possible responses received a numerical equivalent for coding into Microsoft Excel worksheets, in order to standardize responses for data analysis. For example, question 2 asks "which source do you favor, Saratoga Lake or the Hudson River?" Responses were coded: 1. The Hudson River, 2. Saratoga Lake, 3. Either one, 4. Other, 5. Undecided. These codes allowed us to classify responses into categories for analysis.

313 surveys were administered between March 20 and April 8 by Sarah Loomis, Julie Ringer, Vanessa Polansky, and Nina Glatt in Dana Science Center at Skidmore College in Saratoga Springs, New York. Out of every 15 calls made, roughly one survey was completed. The results were compiled into a Microsoft Excel file which was then downloaded into the Statistical Package for the Social Sciences or SPSS, a program for statistical analysis. This program calculated the frequency of specific responses, and the subsequent overall response percentages. In addition to this multivariate analysis which allowed for cross-tabulations and the identification of correlations between specific demographic characteristics and responses to questions in the issue salience, knowledge of the Saratoga Springs water debate, and level of environmental concern sections, SPSS was also used to complete a logistical regression of variables. A logistical regression allows for the determination of

whether certain independent variables, residents' feelings about cost of the project for example, would impact a dependent variable, in this case the probability of Saratoga Springs' residents preferring Saratoga Lake or the Hudson River.

Results

The most significant finding from our research is that the majority of residents polled favored Saratoga Lake. Of the 313 participants, 46.3 percent favored Saratoga Lake compared to 28.4 percent in favor of the Hudson River. 4.2 percent favored another source or conservation of the current source, and 21.1 percent reported that they were Undecided on this issue (Figure 1).

The question then becomes, what exactly is shaping these opinions? The most statistically significant findings of our research are summarized as follows: There is a 57 percent likelihood that Democrats will favor Saratoga Lake while this percentage is only 38 percent for Republicans (Figure 2); Certain factors enhanced the likelihood that respondents would favor Saratoga Lake. If a respondent felt cost was the most important issue when choosing a water source, they had a 75 percent likelihood of favoring Saratoga Lake (Figure 2). The other factors that increased the likelihood of a respondent favoring Saratoga Lake included water quality (56.4 percent), local control (87.3 percent), and impact on development (82.1 percent); People who say that the environment is the most important are 52.1 percent more likely to favor Saratoga Lake than those who say the environment is somewhat or not important; Long-term residents, defined as those who have lived here longer than 15 years, are 50.7 percent more likely to favor Saratoga Lake than short-term residents, who have a 40.1 percent likelihood of preferring Saratoga Lake; Of those who recreate on Saratoga Lake OFTEN, 31 percent favor Saratoga Lake while 49 percent favor the Hudson River (Figure 2). Meaning, the less people use Saratoga Lake, the more likely they are to favor it as the new drinking water source.

Additionally, those respondents who favor Saratoga Lake were more likely to deem a candidate's stance on drinking water a major factor when voting in local elections. Those respondents who reported to be in favor of Saratoga Lake, representing 48 percent of the sample, were 50.9 percent more likely to say that a candidate's stance on drinking water would be a major factor in how they voted (Figure 3). This likelihood was only 32.7 percent for respondents who reported to be supporters of the Hudson River, were undecided on the issue, or preferred another option (Figure 3). When asked how important the environment was to respondents, 16.6 percent reported it to be a MOST important issue (Figure 4). This population has a 63.7 percent likelihood of reporting a candidate's stance on drinking water would be a major factor in how they voted in upcoming city elections, compared to the 20.4 percent likelihood calculated for the remaining 83.4 percent of respondents (Figure 5). Variables that were not significant in leading to an increased likelihood of favoring Saratoga Lake or the Hudson included education, gender, and age.

In order to fully explore our significant findings we divided them up into four appropriate categories. The themes that were identified are: 1. Partisanship, Issue framing, and Salience, 2. Length of Residency, 3. Recreation and Use of Saratoga Lake, and 4. Environmental Attitude and Depth of Commitment. What follows is an examination of the ways in which each theme relates to voter preference.

Partisanship, Issue Framing, and Salience

Work done by Skidmore student Eric Hyers (2005) around the 2005 election found that among greater than 75 percent of Democrats and Independent voters, water was considered the most important issue when compared to development, property assessments, and property taxes. Among Republican voters however, only an approximate 9 percent felt that water was the most important issue (Hyers 2005). This noticeable chasm suggests that environmental concerns are, at least in part, shaped by party identification. Hyers findings are

cohesive with Deborah Guber's (2001) research, which asserts that Republicans and Democrats have diverged over time when it comes to environmental policies. In order to further investigate the question of whether or not partisanship influences voters opinions on environmental issues, we asked voters about their party identification, choice for a water source, and their perceptions of the importance a candidate's stance on drinking water has when they vote in local elections.

When combining the categories of Strong Democrat and Lean Democrat, as well as, the categories Strong Republican with Lean Republican, the data show that only 20.4 percent of all Democrats favored the Hudson compared to 39 percent of Republicans (Figure 6). 53.7 percent of Democrats favored Saratoga Lake, versus only 36 percent of Republicans (Figure 6). These data suggest a positive correlation between preferred source and political identification.

Interestingly, 53.7 percent of Democrats and 44.5 percent of Independent voters found a candidates stance on drinking water to be a major factor when it came to their vote in local elections (Figure 7). Meanwhile, only 26.3 percent of Republicans found a candidates stance on drinking water to be a major factor when they voted (Figure 7). This suggests that while stances on the drinking water source are somewhat split along party lines, it appears to be more of a partisan issue for Democrats and Independents; perhaps reflective of the successful campaign strategies of political elites within the local Democratic Party. Author Garrett Glasgow (1998) mentions the importance for many people to receive clear messages from the political sphere in order to have lasting power. He writes,

> Differences between personal and environmental salience are determined by the amount of information that an individual has about candidate issue positions. An individual may place a great deal of importance on a particular issue, but if no information on candidate positions on that issue is available then that issue is inconsequential to the determination of candidate preference. Instead, an issue that the individual regards as less important but on which information about the candidate positions is available may become the most salient factor in the vote decision. (3)

Considering Glasgow's work in relationship to our findings, it would appear that the Democrats have been extremely successful in choosing how to discuss the drinking water issue. This assertion seems especially fair in light of various comments made by survey participants. In the words of one woman referencing Public Works Commissioner Tommy McTygue, "If Tommy trusts the water, I do too" (Ringer 2007).

McTygue has aggressively promoted the use of Saratoga Lake and is in strong opposition to the Hudson River option; his opinions are widely known throughout the city and county. Democrats and Republican's have long sought for ways of making environmental issues specific to their own interests, often diverging over environmental policies, framing the issues differently in order to garner public support along partisan lines (Shipan and Lowry 2001). The water controversy appears to follow this trend. However, the correlation between preferred source and party affiliation, while statistically significant is perhaps not as strong as might be expected.

In addition to the large role of non-partisan special interest groups within the debate, notably the Saratoga Lake Association, a lack of a clear preferred source along party lines might also be explained by the complicated nature of environmental policies. Issues of the environment are clearly on the minds of the Saratoga Springs electorate, as over 87 percent of residents surveyed said the environment was either a MOST important or VERY important issue for them personally (Figure 7). Environmental concern often has a propensity to, as Guber states, "cut across traditional (and more powerful cleavages) including partisan identification" (Guber 2001). Indeed, she points out, "Politicians seeking elective office are constrained in similar ways by the narrow range of acceptable positions on the environment they can take" (Guber 2003). As candidates must simultaneously work towards establishing a strong environmental stance while not alienating potential voters, the weak correlation between preferred source and party identification is somewhat expected. However, it does

appear that Democrats have been more successful at using environmental attitudes of voters to their advantage, of respondents who reported the environment to be MOST important, 44 percent prefer Saratoga Lake while only 17 percent prefer the Hudson River option (Figure 8). While Saratoga Lake might not necessarily be the more environmentally viable option, Democratic proponents have successfully portrayed it as such.

Yet another explanation for the weak correlation between party identification and source preference, finds its roots in the Saratoga Springs voters themselves. It is often noted that the Saratoga electorate tends to be a highly educated and well-informed population (Hyers, 2005). Our data confirms this, as we found that the overwhelming majority, 93.3 percent, of survey participants were aware that Saratoga Springs was looking for a new drinking water source (Figure 9). The educational background of our sample is also consistent with Hyers' claim; 38.3 percent of survey participants had received a college degree and 33.2 percent had received post-graduate education (Figure 10). What this may indicate then, is that while voters may look towards their party's stance as an initial factor in shaping their opinion, most voters are inclined to make decisions as informed by means other than just partisanship. The way in which information is presented to voters is likely to influence their decisions.

It is clear that the issue has been split somewhat across party lines; however, this only resonates for Democrats and Independents. Being a Republican does not affect source preference, meaning there is not an increased likelihood that Republican respondents will choose one source over the other. What then, are the other complicating factors behind the formation of resident opinion? In order to best understand the relationship between party identification and preferred water source, it is helpful to dissect the ways that opinions on the issues are formed. Presumably, issue framing, the "way issues are symbolically presented" (Guber 2001) and discussed, has huge implications for acquiring public support or eliciting outcry towards any given policy measure. When considering resident choice for the drinking water source, we must also question how the issues

are being framed for the voters.

2005 Water Resource Initiative research provided insight as to what themes were relevant to the discussion surrounding the choice of a new water source. By pulling pertinent information from this work, it was optimal to develop survey questions in regards to: the cost of the project, water quality, impact the chosen water source will have on development, recreation and use of Saratoga Lake and political control over the drinking water source. These issues and concerns have been at the forefront of public discussion, as well as, within 2005 campaigning strategies for both Democrat and Republican candidates. Democrats have focused their campaign for Saratoga Lake on issues salient among voters, including the reduced likelihood of development as well as the benefits of a locally controlled water source, using these ideas to gain support among voters for the use of Saratoga Lake. Republicans have focused on the preservation of Saratoga Lake for recreation in order to gain support for their Hudson River plan. Both sides frequently mention the cheaper cost and higher quality of water that their preferred project will provide.

Survey participants were read statements regarding these various factors, and were then asked to respond if they felt the issue was 1. VERY Important, 2. SOMEWHAT Important, or 3. NOT important when choosing a water source. The final question in the series was which factor, out of all of them, would they consider as the MOST important. As previously mentioned, a logistical regression analysis of the data uncovered that of those who viewed local control and a reduced impact on development to be the most important factors when choosing a water source, there was over an 80 percent likelihood that they would favor Saratoga Lake (Figure 2). This finding is not necessarily surprising, as these issues have been aligned with the Saratoga lake option from the beginning. What is more significant was that of those respondents who reported cost to be the most important factor, there was a 75 percent likelihood that they would choose Saratoga Lake, and those who felt water quality to be the most important, which again represented 60 percent of the total

sample, had a 57 percent likelihood of choosing Saratoga Lake (Figure 2). Voters perceive that Saratoga Lake will provide higher quality drinking water, and that the cost of the project will be cheaper than the Hudson River plan. Democrats and proponents of Saratoga Lake have clearly been far more successful at presenting their option in terms of factors most salient to voters.

When considering issue framing, it is important to understand where the information voters are getting is coming from. Regarding the drinking water issue, residents largely receive information from media outlets, 68.4 percent report to read the Saratogian newspaper, in addition to information received from elected officials (Figure 11). There was no direct correlation between source preference and source of information, so the messages of Saratoga's elected officials were examined in order to better understand how information distribution and issue framing were affecting resident preference. The overwhelming majority of people in favor of Saratoga Lake identify themselves as Democrats. This suggests that issue framing does matter, and degree of salience may be a function both of who is doing the issue framing and the tactics that they are using to do so.

Democrats focused on the fact that PCB's have been found in the Hudson, and have successfully translated this into an issue of public health, inciting a credible fear into residents, thus effectively promoting the use of Saratoga Lake as a better drinking water source (Ringer 2007). Republicans, in turn, have also attempted to use quality to gain support for the Hudson, pointing to a more historically pristine Hudson River watershed by comparison to the Saratoga Lake watershed (Ringer 2007). From the previous breakdown of preference along party lines, it appears as though the Democratic approach has been more successful.

Length of Residency

Thus far we have discussed the ways that partisanship and issue framing impact resident opinion. Yet another consistent theme in our surveys, as well as, in the aforementioned previous stakeholder analysis, is the

relationship between citizens' length of residency in the city of Saratoga Springs, and subsequent sentiments about the future drinking water source. A noticeable conflict exists, largely from the perspective of residents who identify themselves as "natives," or old-timers and their opposition to views expressed by "non-natives" or newcomers throughout the water source debate. Respondents who have lived in Saratoga Springs longer than fifteen years are 50.7 percent more likely to choose Saratoga Lake as their preferred future drinking water source than short term residents, newcomers who have been in Saratoga for less than fifteen years (Figure 2). Demographic factors, namely income and partisanship, appear to be the major factors shaping the underlining differences these two groups of residents.

This existing resentment between the two groups seems to be due to newcomers' resistance to development of the area, after they themselves have participated in the expansion of the city. Many old-timers dislike this inconsistency, one stating:

> The people who moved into that area were very concerned about open space issues. They did not want sprawl development, they did not want the city to grow too much, they did not want the city to grow too much. Of course, they're part of the growth, but it's the mindset of I'm coming here because I like this quiet city, and now I don't want any more. And they were people who were very, very inclined to the democratic position of open space, which is more environmentally friendly, let's limit growth, let's be really cautious about where we're developing, and certainly let's oppose sprawl development, lets concentrate on building downtown. (Kellogg and Ennis-McMillan 2005)

While the existing income disparity between old-timers and newcomers is a source of frustration for many, the most salient point mentioned is the inequality of overall commitment, not just in fiscal terms, to the city. In sociologist Rik Scarce's discussion of contentious issues that arise between old-timers and newcomers in the discussion of natural resource distribution and use, he states, "to treat the land and the community as places to be briefly visited each year and then forgotten about is a slight to the place and people. 'Community' and

'commitment' share more than just the same etymological root. With the former comes an expectation of the latter" (Scarce 2000).

Many wealthy Saratogians are only in the city for the summer months, particularly the horse-racing season between July and August. While this is not to say that the city does not appreciate or even depend on the support from this source of revenue, it does change the way Saratoga Springs residents view their city, a site for summer recreation rather than a community to raise a family. Scarce (2000) comments that a "dominant Old-timer construction of the Newcomers is that of tourists or, perhaps more charitably, recreationists. The Newcomers want relaxation when they visit their homes." Similarly, one Saratoga resident stated,

> It's frustrating when you don't see those same people, aren't involved in the YMCA, or the hospital, or Skidmore, or the, you know, Harry M. West Center for Children or Mary's Haven and all of these different exciting projects that make Saratoga Springs special, you know I'm frustrated when they come to town and they don't feel the need to give, financial or with their time. (Kellogg and Ennis-McMillan 2005)

Many note the demographic shift that appears to be happening in the city, wherein the majority of overall residents will begin to fall within the newcomer or short term category, thereby shifting the partisanship of voters and the salience of specific issues. This assertion is further validated by the 2005 Democratic sweep of all seven city council positions, for the first time in Saratoga history. The results of our survey reported a relatively even split along party lines, with Democrats as 32.9 percent of respondents, Independents 35.1 percent, and Republicans 31.9 percent (Figure 12). This even distribution is evidence of changing Saratoga Springs electorate, as a historically Republican area becomes increasingly more split.

Besides partisanship, socioeconomic bracket is another considerable difference between short term and long term residents. 63.5 percent of residents within the over $150,000 bracket have lived in the city less than 15 years, while this same residency group (less than 15 years) represents only 45% of the total sample surveyed; 8.3 percent of the total sample population falls within the over $150,000 income bracket and has lived

in the city for less than 15 years (Figure 13). If income of residents were positively correlated with length of residency, the longer a resident has lived in the city, the higher their income. As suspected, this is not the case. There is a -0.055 correlation between income and length of residency, short term residents are responsible for increasing the average income within Saratoga Springs (Figure 14). While income might not be significant in determining the likelihood of choosing one source versus the other, it is likely to impact other demographic identifiers, namely partisan affiliation.

Newcomers to the city make more money than the average old-timer; income likely has an impact on partisanship and therefore opinions about the environment, and specifically in this case, the preferred future source of drinking water. However, perhaps this assumption is unfounded, as within this same group of residents in the over $150,000 bracket, 18% favor the Hudson River while only 10.3% favor Saratoga Lake (Figure 15). This speaks to the fact that while over 60% of these people have lived in Saratoga Springs for less than 15 years, newcomers are not currently representative of the larger population's opinion.

Recreation and Use of Saratoga Lake

Central to the debate surrounding the future drinking water source for Saratoga Springs is the importance of Saratoga Lake to many people, largely for recreational purposes. Many citizens, especially those who have grown up within the city limits, have fond memories of the lake as a child, using it for swimming, and boating, as well as enjoying beautiful sunsets along its shores (Ringer 2007). Those who currently own property around the lake, or enjoy its' waters with speed boats and ice fishing equipment share an equal appreciation for the recreational options Saratoga Lake has to offer (Ringer 2007). Concerns arise regarding the potential impacts on the lake as a recreational resource, with the classification as a drinking water source. Many worry of restricted use and decreasing quality of the lake as a whole (Ringer 2007). Additionally, those who have

property, homes, and businesses surrounding the lake worry about the potential economic impacts, most notably decreases in property values or lost benefits of tourism (Ringer 2007). Preliminary studies completed in the spring of 2006 by Skidmore students Jenn Marks and Caroline Bergelin uncovered an interesting relationship between the preferred source of residents, and whether or not they use Saratoga Lake for recreational purposes. Of those residents who reported to use the lake for recreation, 54.8 percent opposed to use of the lake for a drinking water supply, while 35.5 percent were in support (Marks and Bergelin 2006).

Continuing with this line of thinking, survey participants were asked how often they use Saratoga Lake for recreational purposes, as well the importance of preserving the Lake as a recreational resource. The results of these questions were then cross-tabulated with the preferred source of residents. This uncovered a direct correlation between the frequency of use, and subsequent preference for the new water source. Consistent with Marks and Bergelin's previous findings, of residents who reported using Saratoga Lake OFTEN for recreational purposes, 31 percent prefer using Saratoga Lake while 49 percent prefer the Hudson River option (Figure 16). Of those respondents who report using the lake SOMETIMES, 48 percent prefer Saratoga Lake option while 32 percent favor Hudson River alternative, of respondents who reported to RARELY use Saratoga Lake, 52 percent prefer Saratoga Lake while 24 percent prefer the Hudson, and of those who NEVER use Saratoga Lake for recreational purposes, 48 percent favor the lake option while 19 percent favor the Hudson (Figure 17).

There is clearly a relationship between the frequency respondents report using Saratoga Lake for recreational purposes, and their preferred source for the future drinking water source for Saratoga Springs. The less often respondents use Saratoga lake for recreation, the less inclined they are to be in opposition of using its use as a drinking water source. This correlation may appear obvious, however, with the data we can see the almost perfectly linear relationship between use and source preference. This suggests that if public access to Saratoga Lake was increased, allowing for more residents to use it more frequently for recreation, less of the population would support its use as the future drinking water source for Saratoga Springs.

Environmental Attitude and Depth of Commitment

The final theme discussed is the way in which environmental attitude has influenced resident opinion. A poll conducted in 2004 by the Yale School of Forestry and Environmental Studies found that of 1,000 adults surveyed nationwide, 84 percent reported that a candidate's stance on the environment would be a factor in influencing who they would vote for during the next election (Yale 2004). Furthermore, 63 percent of Americans said that the US government was not doing enough to ensure that the environment was being protected, and three out of five American's categorized the quality of the country's overall environmental conditions as either *fair* or *poor* (Yale 2004). The findings of the Yale survey suggest citizens' considerable concern for the environment and more importantly, demonstrate that this concern is salient enough to influence voting behavior. While Yale's findings suggest that environmental attitude does indeed affect voting patterns, it is important to note that these results deal explicitly with national voting trends. Our goal was to identify the influence of environmental attitude on issues of local concern. By using a topic of local consciousness, the debate over the future drinking water source for Saratoga Springs, we were attempting to uncover how environmental attitudes of residents' impact their preferred source.

Quantifying personal values, particularly about issues as broad as the environment requires a set of questions that will allow respondents to provide honest answers about their depth of commitment. The first obstacle when attempting to accurately quantify participants' environmental attitudes is the difficult nature of the term "environment." There is such a broad array of definitions associated with the environment that making a connection to it as one tangible idea is extremely difficult. As green-business expert, Joel Makower (2005) points out,

> Part of the problem is that activists don't fully appreciate that the word "environment" means different things to different people. For some, it means big,

> global-scale issues, like global warming, biodiversity, a hole in the ozone layer. Others think locally-- their neighborhood watershed, the leaky landfill down the street. Still others treasure their ability to hunt, fish, swim, hike and canoe in parks and public lands; and a fourth group thinks about fighting crime, graffiti, traffic, pollution and litter when they think about 'environmental' issues. 'So, it turns out where you stand on the environment has a lot to do with where you sit.' Just because you want the farmland near your subdivision protected from development doesn't mean you're concerned about global warming.

Defining the term environment is not the only obstacle when attempting to discern environmental attitude. Judging the actual depth of environmental awareness is also extremely problematic due to the fact that what people support verbally is often very different than their practices. In her 2005 article, Katharine Mieszkowski discusses that while broad support for environmental issues exists, it is relatively insignificant. Oftentimes people are likely to claim deep interest or even an obligation to issues of environmental protection or importance, yet when it comes down to affecting their actions, namely political decisions, most Americans are less inclined to place much importance on such issues (Miezkowski 2005).

There are sizable obstacles for quantifying environmental ethos. Therefore, our study attempted to uncover environmental attitude not only by asking questions explicitly regarding perceptions of the environment, but also sought to examine environmental awareness by engaging in discussions on topics that may not appear to have obvious environmental implications. In addition to asking respondents to quantify personal importance of the environment and beliefs of local environmental quality, we also asked them to rate the importance of water quality, preserved space for recreation, and reduction of local development and sprawl. Each of these factors, while perhaps not explicitly environmental issues, have severe environmental implications. Such issues deeply resonate in the minds of voters and both sides have successfully framed the debate as such. In this way we were able to gain an understanding of personal perceptions of environmental attitude, and also examine what participants prioritize in actual practice.

Survey participants were asked to give their opinions on the quality of the environment in Saratoga Springs as well as in the United States. When asked, how would you rate the quality of the environment in Saratoga Springs today? 36.1 percent reported it as being EXCELLENT, 53.4 percent claimed it as GOOD, 8.0 percent said that it was FAIR and 2.2 percent believed it was POOR (Figure 18). When asked, how would you rate the quality of the environment in the United States today? 3.8 percent of those surveyed said it was EXCELLENT, 38.0 percent reported it as GOOD, 47.3 percent reported it was FAIR, and 10.9 felt that it was POOR (Figure 19). The comparison between these two questions is interesting, as it shows that the majority of survey participants perceive Saratoga Springs to have a higher degree of environmental quality than the United States as a whole.

In reality, Saratoga Springs faces many of the same environmental problems that cities around the country must confront. Rapid development, acid rain fall, local active superfund sites, and the inescapable impacts of global warming all influence Saratoga Springs. Still, most residents believe that Saratoga has either an EXCELLENT or GOOD quality of environment compared with the majority who felt that the quality of the environment in the United States was FAIR. What this tells us is that there is a certain predilection on behalf of residents to perceive their hometowns and backyards as environmentally superior to others. Of course, things are all relative and when compared to other areas. It is true that Saratoga Springs is better off than many environmentally. However, it would appear that people's perceptions of their immediate surroundings are far more favorable than they believe to be the case elsewhere. If people have stake in the environmental quality of their hometown, as these views seem to suggest, it would makes sense that people would be more apt to favor environmental friendly options.

Next, participants were asked to reflect on how important they considered the environment to be. When asked, "How important to you is the environment? Would you say that is one of the most important things,

very important, somewhat important, or not important?" The majority of participants, 70.3 percent, reported that the environment was a VERY important issue (Figure 7). This is fairly unsurprising given the fact that most people are likely to be in support of an environmental agenda, even if not necessarily supporting it in practice. 16. 6 percent responded that they considered the environment to be the MOST important thing for them, 12.8 percent said that it was SOMEWHAT important. 0.3 percent reported it to be NOT important (Figure 7). While there is nothing particularly surprising about these findings, when cross-tabulated with voter preference, we found that of respondents who claimed that the environment was MOST important, 44.2 percent also favored Saratoga Lake (Figure 8). The results of the logistical regression exposed that if a respondent reported the environment to be MOST important to them, they would have a 52.1 probability of preferring Saratoga Lake (Figure 2).

Noticeably absent from the issues surrounding water source preference is any mention of a clearly environmentally friendly option, the choice that will have the least negative impacts on the environment. While some may point out that drinking water is not explicitly an environmental issue, a closer examination would suggest that it is. Watershed management, ecosystem health, and the building of infrastructure are all things that explicitly impact the environment, in addition to the public health issues that arise due to limited availability of a sustained source of clean drinking water. However, these issues have been siphoned out of their environmental context. It seems that Democrats have gained support for the use of Saratoga Lake by successfully framing the choice regarding issues notably more salient to voters than the environment alone, including cost, local control, quality and impacts on development.

In an article published in 2004 by Michael Shellenberger and Ted Nordhaus, the authors assert, "the environmental movement's foundational concepts, its method for framing legislative proposals, and *its very institutions* are outmoded." What Saratoga Democrats did, it seems, was to heed Shellenberger and Nordhaus'

advice, taking a more comprehensive approach to this environmental problem. The have successfully framed the water resource discussion using topics proven to be extremely salient within the local sentiment, rather than approaching this issue as explicitly environmental. In turn, this strategy appears to have worked within the city, as a significantly higher percentage of voters favor the Saratoga Lake option.

If we are to understand issues of development and water quality as part of the greater topic of environment, then it becomes clear that environmental attitude is an important factor in influencing voter preference. Those who were more sympathetic to environmental concerns, or were in favor of reducing development as well as maximum water quality, had a greater likelihood of preferring Saratoga Lake. Perhaps Saratoga Lake is the clear "environmental" alternative, or perhaps proponents of using the lake have more effectively manipulated the salience of environmental issues to gain support.

Limitations and Possible Sources of Error

Determining specifically what motivates the water source preferences within the Saratoga Springs voting population is an ambitious task. With any attempt at such a project comes a slew of limitations and possible sources of error within the results. First and foremost, the ideal sample population would have been larger in size in order to ensure any even more representative sample. However due to time constraints and the willingness of respondents, the sample population was limited to 313. While it isn't likely that the results would have drastically changed with a larger data set, this limitation must be accounted for in the discussion of results.

In addition to the sample size, limitations arose due to the language of certain survey questions. Development and sprawl are particularly contentious issues, especially in the discussion of environmental attitudes. While the word 'sprawl' was not explicitly written in the survey, many respondents were quick to assume any mention of the word 'development' had negative implications. An environmental studies survey from Skidmore College might trigger certain assumptions about the students who designed it, as Skidmore has

traditionally been associated with a liberally minded population. This association is likely to influence responses, especially regarding the discussion of the chosen water source's impact on development. The wording of other questions, in particular those regarding the quality of the environment, as well as, personal affinities to the environment could have been worded more clearly, providing respondents with a better grasp of exactly what was meant by the word 'environment.'

Though randomizing the list of phone numbers and calling each number three times before crossing it off our phone list increased the diversity of our sample, there is still considerable room for error in this regard. Even with built in defenses against this source of error, including a large window of time during the day wherein calls were placed, it is still possible that there were built in biases in the sample population studied. However, this is assumed with any survey drawing from a random list of numbers attempting to gain a representative sample of a much larger population.

Conclusion

The voters of Saratoga Springs have spoken. The majority of residents surveyed prefer Saratoga Lake for the city's future drinking water source. In analyzing the data accumulated from our survey, we were successfully able to dissect what is driving residents' opinions on the matter. Overwhelmingly, low cost and high water quality are the most significant factors behind the formation of residential opinions on this matter. Democrats and proponents for the use of Saratoga Lake have been far more successful than opponents in framing the Saratoga Lake option as the optimal choice in regards to these issues. Furthermore, they have effectively brought to attention the ways in which choosing Saratoga Lake will allow for continued local control over the water source, and will reduce the likelihood of development in the area. Saratoga Lake proponents have championed all but preservation for recreation in their campaign to convince residents of the benefits of choosing Saratoga Lake over the Hudson River. Whether or not the Lake is truly the better choice in regards to these issues is unclear, however it is irrelevant all the same. What matters is the convincing message Democrats

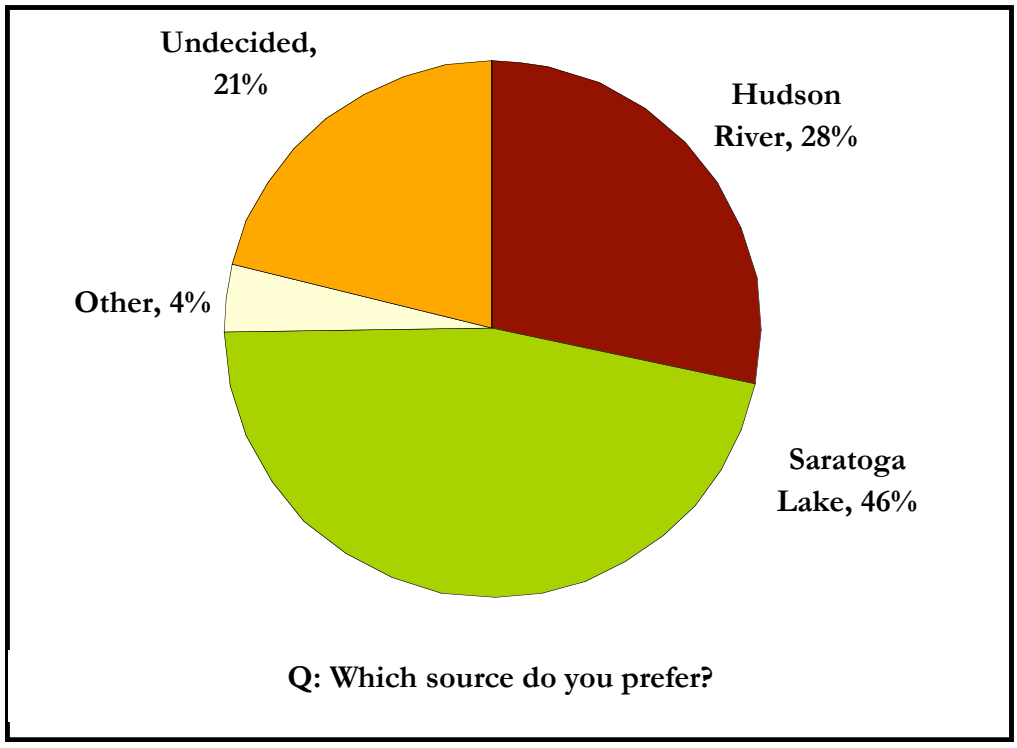
have sent to voters. Policy makers have effectively disseminated the message that Saratoga Lake is a cheaper project, will provide higher quality water and avoid contact with PCBs, will reduce irresponsible development in the area, and will provide the city of Saratoga Springs with a water source easily controlled by local political entities. Lastly, according to Democrats, Saratoga Lake is a more environmentally viable option in comparison. These are the salient issues on the minds of voters, making promises in these areas leads to community support. While proponents of the Hudson have been successful at pointing out that choosing the Hudson will without a doubt preserve Saratoga Lake as a recreational resource, they have been unable to create a compelling narrative around cost, water quality, development, or control.

Yet, while it is clear that proponents of Saratoga Lake have done a better job of garnering public support, there are still questions of how fixed these voters are in their opinions. 47 percent of respondents polled currently feel as though they do not have sufficient information to be confident in their choice (Figure 20), suggesting that a large population is still looking for concrete answers. Proponents on either side of the issue must take this into consideration and make campaign strategy changes. Saratoga Springs residents want clear, accurate, consistent data regarding the potential impacts of using either Saratoga Lake or the Hudson River. Our recommendations are for proponents of both sources to continue to focus on the cost and water quality benefits of their preferred sources. Proponents of Saratoga Lake should continue to highlight both the way that choosing the lake will reduce the likelihood of development, as it does not require a pipeline to be built, and the way it will allowed for continued local, meaning city, control over the water source.

The objective of this study was to better understand how public opinion is formed in the context of an environmental issue. Using a local case study proved to be an excellent way of examining the many layers of an environmental issue that many cities' face, the need for clean drinking water. By exploring the situation of Saratoga Springs we were able to see how environmental agenda and politics relate. What can be concluded, is that discussions around a new drinking water source are everything but environmental in nature. While people

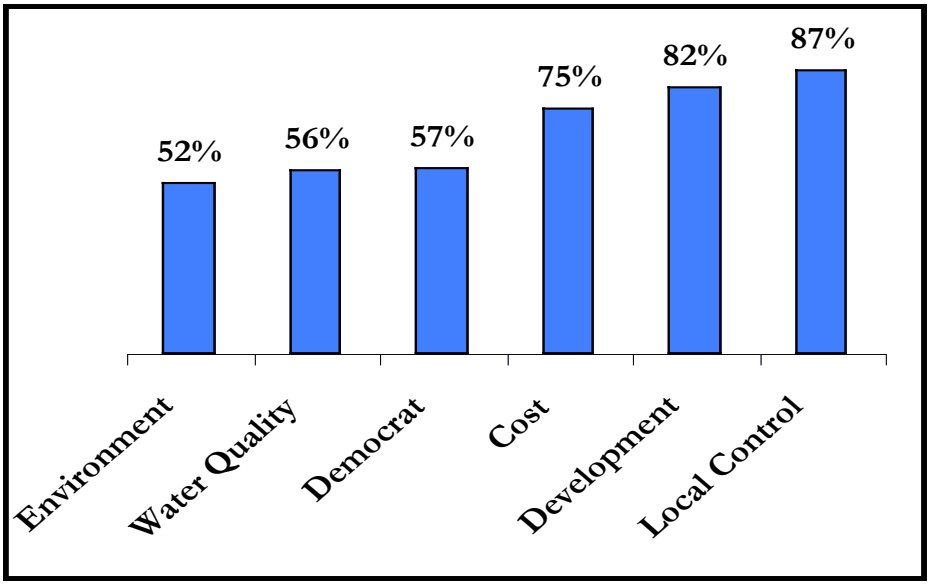
may theoretically support an environmental agenda, the more salient factors are those themes that have the greatest tangible impact, in this case cost and water quality. Still, what is important to consider are the subversive ways that the environment can be represented, especially when dealing with local politics. By discussing the issues of development and water quality, leaders in Saratoga Springs have actually taken on an environmental agenda, albeit an indirect one. Perhaps then, the real focus of environmentalists should be to learn to reframe issues around topics that are most salient to citizens. Proponents of Saratoga Lake seemed to achieve this goal quite well, as not only was there a likelihood of people who support water quality and cheaper cost to favor Saratoga Lake, but also a higher likelihood on the part of people who care greatly about the environment to favor it. The real lesson then is not to avoid discussions based on an environmental agenda; rather, leaders should engage in these conversations while simultaneously framing the issues around other more salient topics. In this way, both goals can be met, and with any luck, subsequent changes will not only meet voter approval, but also remain environmentally beneficial as well.

FIGURE 1: **Source Preference**



		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Hudson River	89	28.4	28.4	28.4
	Saratoga Lake	145	46.3	46.3	74.8
	Other	13	4.2	4.2	78.9
	Undecided	66	21.1	21.1	100.0
	Total	313	100.0	100.0	

FIGURE 2: **Likelihood of Preferring Saratoga Lake as Based on Respondents' Most Important Factor**



Variables in the Equation

	Variables	B	S.E.	Sig.	
Issue Framing	Cost	1.43	0.58	0.01	***
	Quality	1.17	0.47	0.01	***
	Local Control	2.37	0.60	0.00	***
	Pace of Development	1.83	0.65	0.01	***
Partisanship	DEM	0.66	0.31	0.03	**
Demographic	Use Saratoga Lake very often	-0.77	0.38	0.04	**
	Environmentalist	0.47	0.25	0.06	*

Method Logistic Regression
Dependent variable coded 1 if Saratoga Lake
N= 313, % predicted correctly 62.6%

FIGURE 3: **Supporters of the lake are more likely to say a candidate's stance on drinking water is very important**

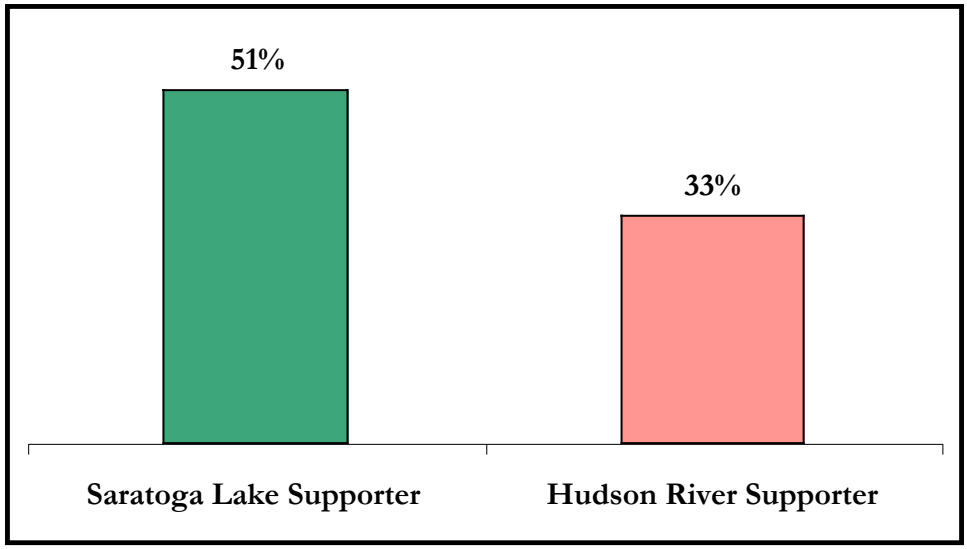
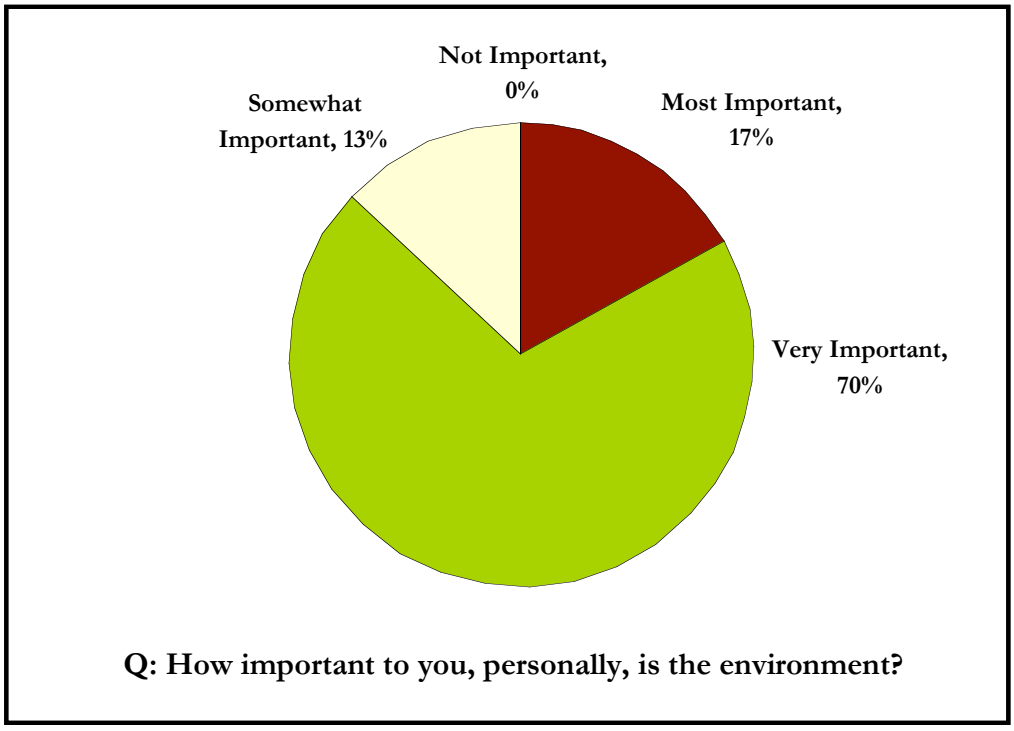


FIGURE 4: **Personal Importance of the Environment**



		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Most Important	52	16.6	16.6	16.6
	Very Important	220	70.3	70.3	86.9
	Somewhat Important	40	12.8	12.8	99.7
	Not Important	1	.3	.3	100.0
	Total	313	100.0	100.0	

FIGURE 5: **If respondents think the environment is MOST important, they are more likely to think a candidate's stance on drinking water is a major factor when voting in elections**

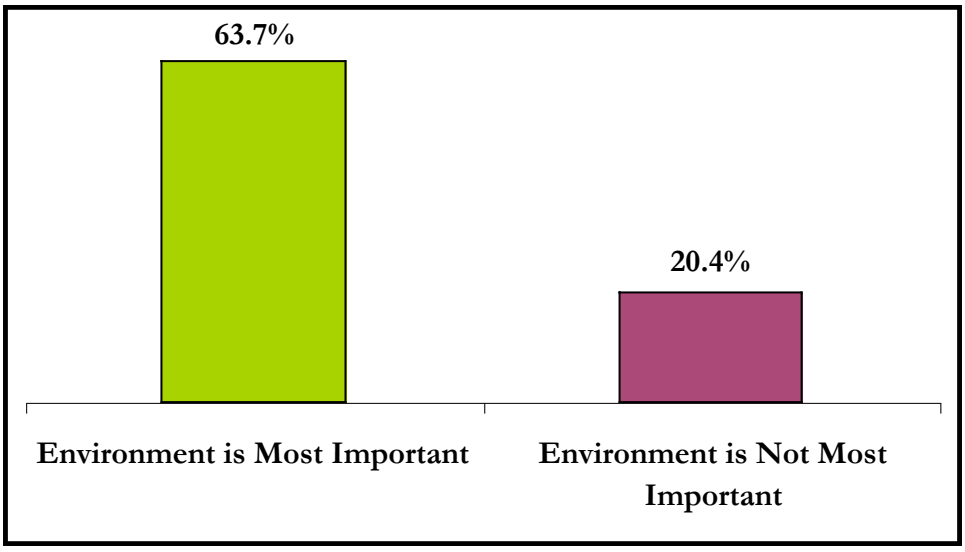
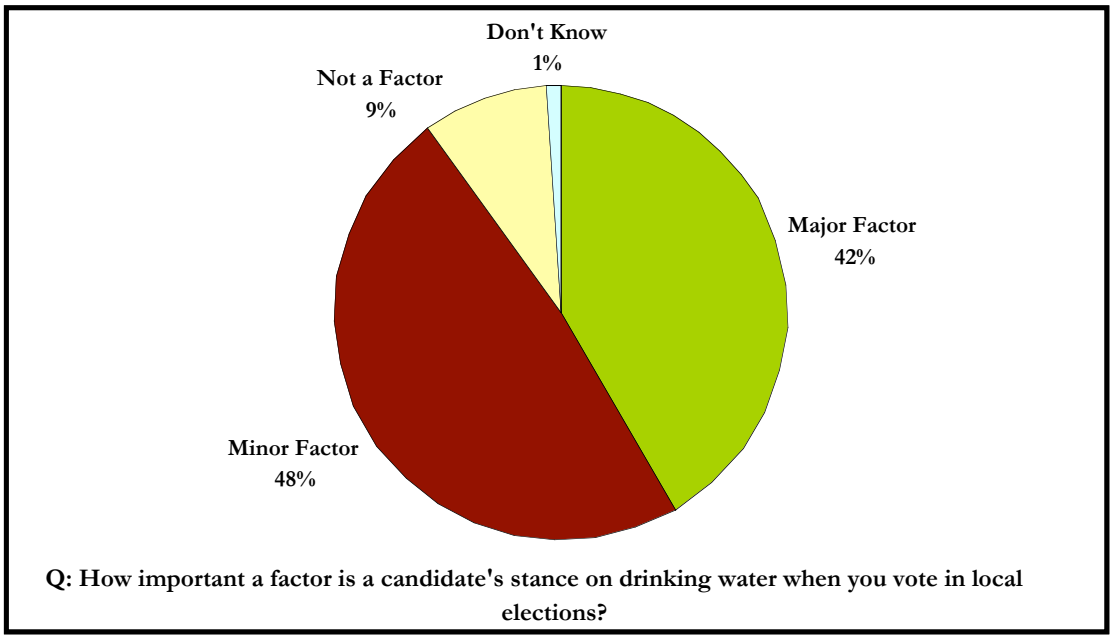


FIGURE 6: **Cross-Tabulation of Party Identification and Preferred Source**

			PID categories			
			Democrat	Independent	GOP	Total
Which Source do you favor?	Hudson River	Count	21	29	39	89
		% within Which Source do you favor?	23.6%	32.6%	43.8%	100.0%
		% within PID categories	20.4%	26.4%	39.0%	28.4%
		% of Total	6.7%	9.3%	12.5%	28.4%
	Saratoga Lake	Count	59	50	36	145
		% within Which Source do you favor?	40.7%	34.5%	24.8%	100.0%
		% within PID categories	57.3%	45.5%	36.0%	46.3%
		% of Total	18.8%	16.0%	11.5%	46.3%
	Other	Count	1	9	3	13
		% within Which Source do you favor?	7.7%	69.2%	23.1%	100.0%
		% within PID categories	1.0%	8.2%	3.0%	4.2%
		% of Total	.3%	2.9%	1.0%	4.2%
	Undecided	Count	22	22	22	66
		% within Which Source do you favor?	33.3%	33.3%	33.3%	100.0%
		% within PID categories	21.4%	20.0%	22.0%	21.1%
		% of Total	7.0%	7.0%	7.0%	21.1%
Total		Count	103	110	100	313
		% within Which Source do you favor?	32.9%	35.1%	31.9%	100.0%
		% within PID categories	100.0%	100.0%	100.0%	100.0%
		% of Total	32.9%	35.1%	31.9%	100.0%

FIGURE 7: **Importance of a Candidate's Stance on Drinking Water When Voting**



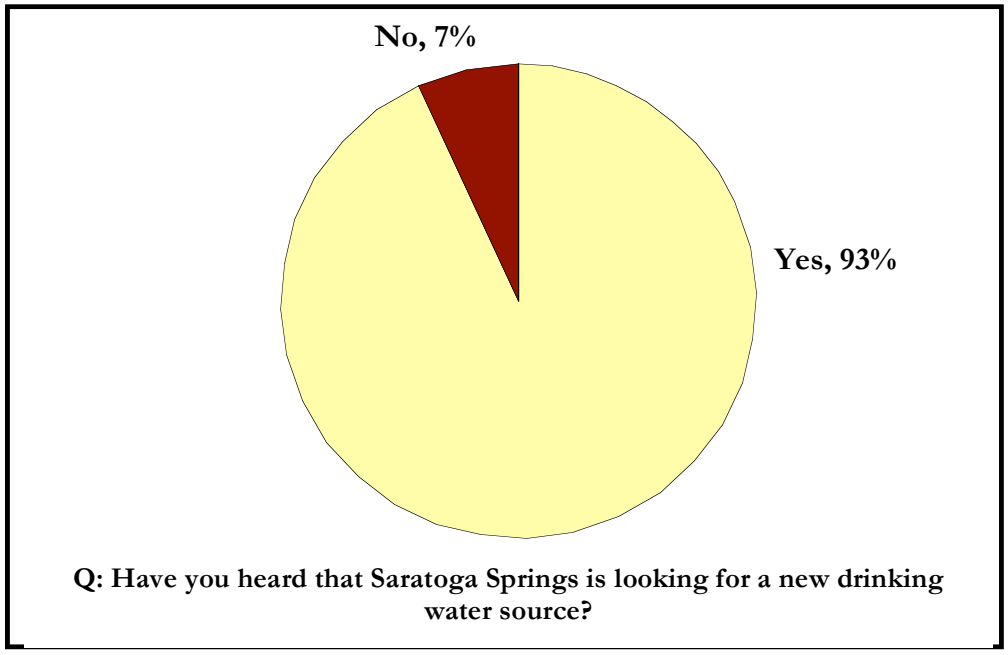
Q: How important a factor is a candidate's stance on drinking water when you vote in local elections?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Major Factor	131	41.9	41.9	41.9
	Minor Factor	152	48.6	48.6	90.4
	Not a Factor	28	8.9	8.9	99.4
	Don't Know	2	.6	.6	100.0
	Total	313	100.0	100.0	

FIGURE 8: **Cross-Tabulation of Importance of Environment and Source Preference**

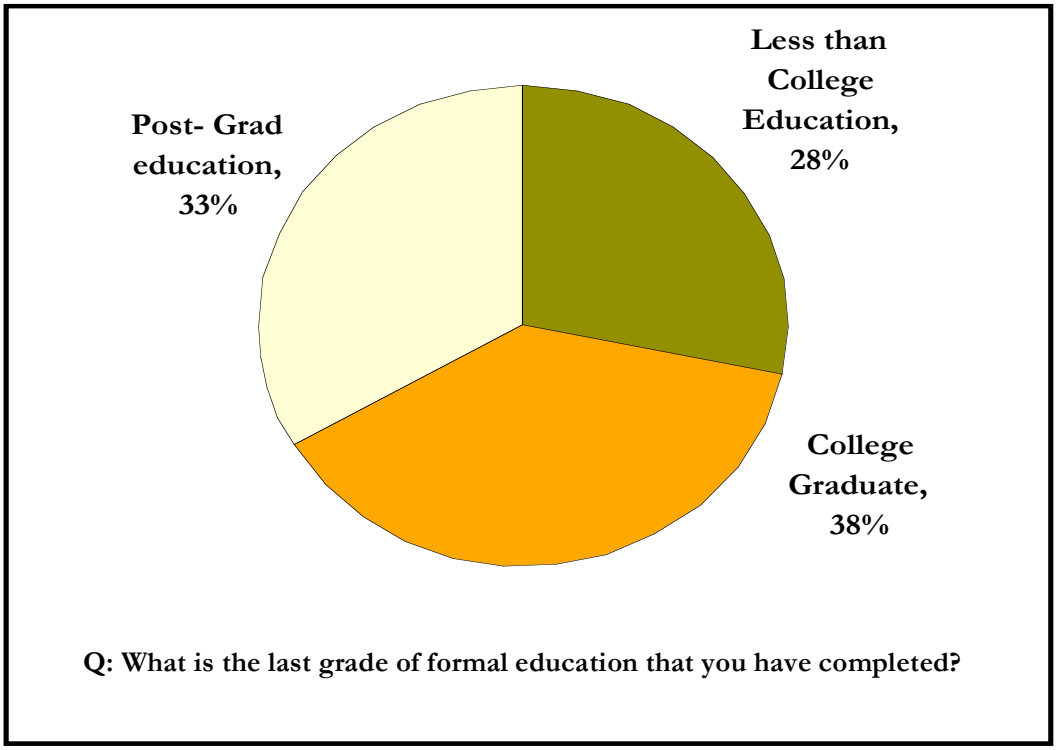
			PID Categories			Total
			Democrat	Independent	GOP	
Importance of Environment	Most Important	Count	23	18	11	52
		% within Importance of Environment	44.2%	34.6%	21.2%	100.0%
		% within PID Categories	22.3%	16.4%	11.0%	16.6%
		% of Total	7.3%	5.8%	3.5%	16.6%
	Very Important	Count	67	81	72	220
		% within Importance of Environment	30.5%	36.8%	32.7%	100.0%
		% within PID Categories	65.0%	73.6%	72.0%	70.3%
		% of Total	21.4%	25.9%	23.0%	70.3%
	Somewhat Important	Count	13	11	16	40
		% within Importance of Environment	32.5%	27.5%	40.0%	100.0%
		% within PID Categories	12.6%	10.0%	16.0%	12.8%
		% of Total	4.2%	3.5%	5.1%	12.8%
	Not Important	Count	0	0	1	1
		% within Importance of Environment	.0%	.0%	100.0%	100.0%
		% within PID Categories	.0%	.0%	1.0%	.3%
		% of Total	.0%	.0%	.3%	.3%
Total		Count	103	110	100	313
		% within Importance of Environment	32.9%	35.1%	31.9%	100.0%
		% within PID Categories	100.0%	100.0%	100.0%	100.0%
		% of Total	32.9%	35.1%	31.9%	100.0%

FIGURE 9: **Awareness that Saratoga Springs is Looking for a New Drinking Water Source**



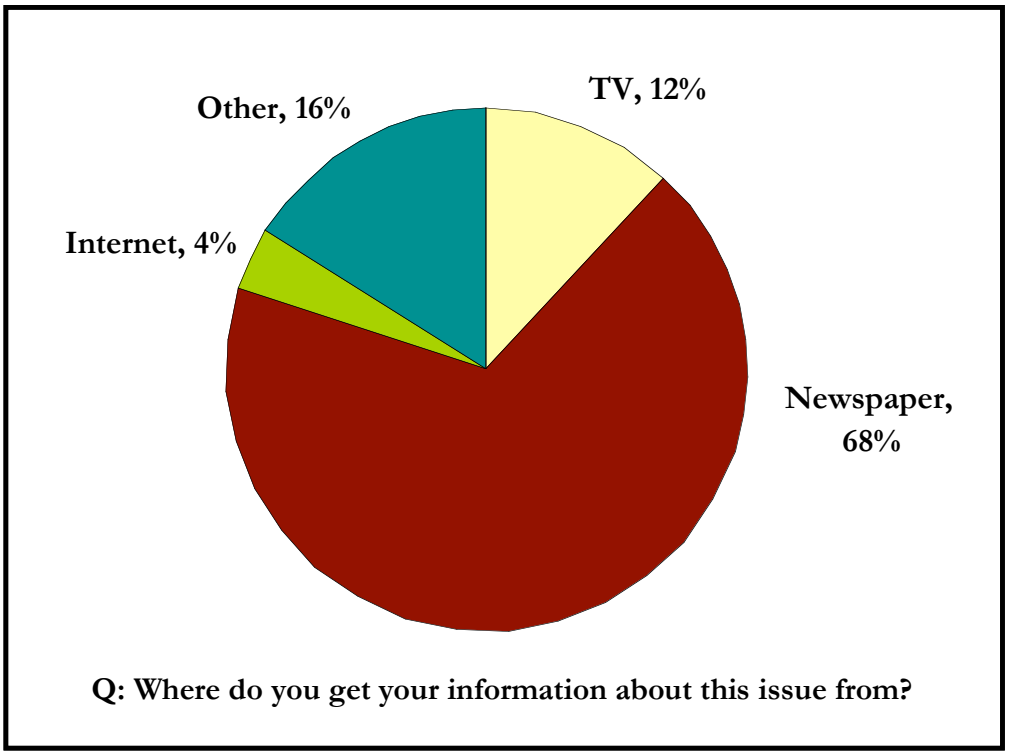
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	292	93.3	93.3	93.3
	No	21	6.7	6.7	100.0
	Total	313	100.0	100.0	

FIGURE 10: **Education**



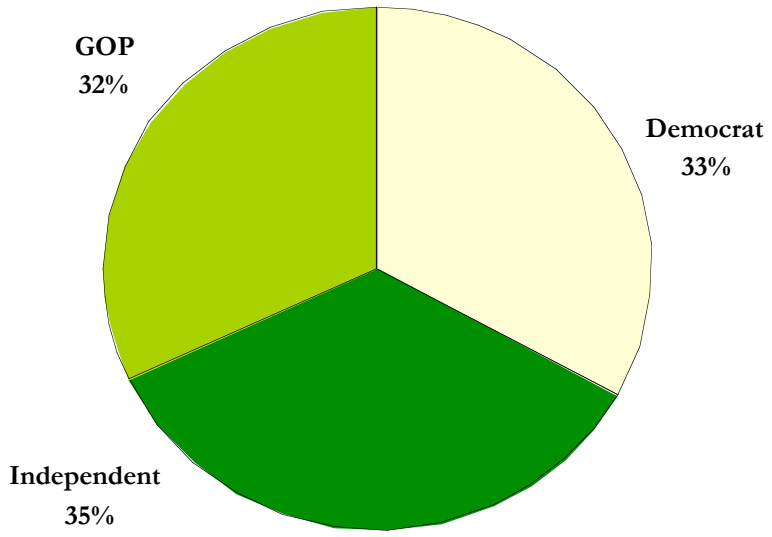
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than College Education	89	28.4	28.4	28.4
	College Graduate	120	38.3	38.3	66.8
	Post- Grad education	104	33.2	33.2	100.0
	Total	313	100.0	100.0	

FIGURE 11: **Sources of Information**



		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	TV	37	11.8	11.8	11.8
	Newspaper	214	68.4	68.4	80.2
	Internet	12	3.8	3.8	84.0
	Other	50	16.0	16.0	100.0
	Total	313	100.0	100.0	

FIGURE 12: **Party Identification**



Q: When it comes to politics do you generally consider yourself a Democrat, Independent, or a Republican?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Major Factor	131	41.9	41.9	41.9
	Minor Factor	152	48.6	48.6	90.4
	Not a Factor	28	8.9	8.9	99.4
	Don't Know	2	.6	.6	100.0
	Total	313	100.0	100.0	

FIGURE 13: **Cross-Tabulation of Income and Residency**

			Residency Categories				Total
			1-5 years	6-15 years	16-25 years	26+ years	
Income Bracket	Under $25,000	Count	3	8	3	9	23
		% within Income Bracket	13.0%	34.8%	13.0%	39.1%	100.0%
		% within Residency Categories	6.3%	8.6%	5.9%	7.4%	7.3%
		% of Total	1.0%	2.6%	1.0%	2.9%	7.3%
	$25-50,000	Count	13	8	5	29	55
		% within Income Bracket	23.6%	14.5%	9.1%	52.7%	100.0%
		% within Residency Categories	27.1%	8.6%	9.8%	24.0%	17.6%
		% of Total	4.2%	2.6%	1.6%	9.3%	17.6%
	$50-100,000	Count	18	25	22	47	112
		% within Income Bracket	16.1%	22.3%	19.6%	42.0%	100.0%
		% within Residency Categories	37.5%	26.9%	43.1%	38.8%	35.8%
		% of Total	5.8%	8.0%	7.0%	15.0%	35.8%
	$100-150,000	Count	5	28	8	18	59
		% within Income Bracket	8.5%	47.5%	13.6%	30.5%	100.0%
		% within Residency Categories	10.4%	30.1%	15.7%	14.9%	18.8%
		% of Total	1.6%	8.9%	2.6%	5.8%	18.8%
	Over $150,000	Count	9	17	8	7	41
		% within Income Bracket	22.0%	41.5%	19.5%	17.1%	100.0%
		% within Residency Categories	18.8%	18.3%	15.7%	5.8%	13.1%
		% of Total	2.9%	5.4%	2.6%	2.2%	13.1%
	Refuse	Count	0	7	5	11	23
		% within Income Bracket	.0%	30.4%	21.7%	47.8%	100.0%
		% within Residency Categories	.0%	7.5%	9.8%	9.1%	7.3%
		% of Total	.0%	2.2%	1.6%	3.5%	7.3%
Total		Count	48	93	51	121	313
		% within Income Bracket	15.3%	29.7%	16.3%	38.7%	100.0%
		% within Residency Categories	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	15.3%	29.7%	16.3%	38.7%	100.0%

FIGURE 14: **Correlation between Length of Residency and Income**

		Residency Categories	Income Bracket
Residency Categories	Pearson Correlation	1	-.055
	Sig. (2-tailed)		.331
	N	313	313
Income Bracket	Pearson Correlation	-.055	1
	Sig. (2-tailed)	.331	
	N	313	313

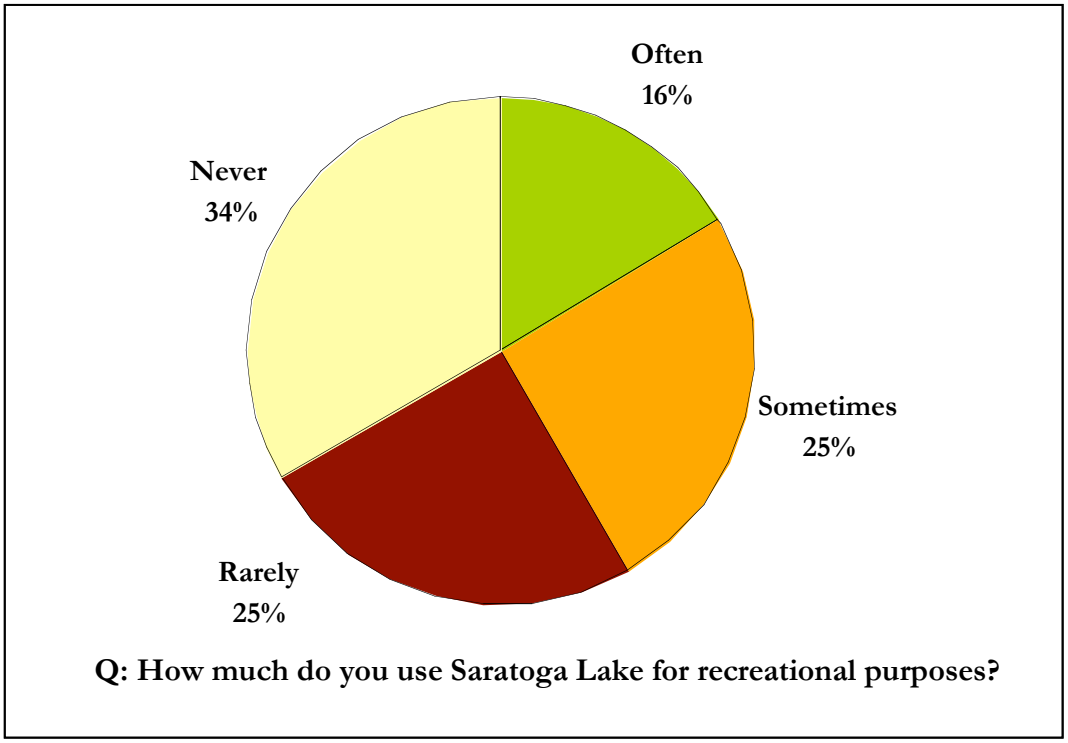
			Income Bracket						
			Under $25,000	$25-50,000	$50-100,000	$100-150,000	Over $150,000	Refuse	Total
Which Source do you favor?	Hudson River	Count	6	14	29	15	16	9	89
		% within Which Source do you favor?	6.7%	15.7%	32.6%	16.9%	18.0%	10.1%	100.0%
		% within Income Bracket	26.1%	25.5%	25.9%	25.4%	39.0%	39.1%	28.4%
		% of Total	1.9%	4.5%	9.3%	4.8%	5.1%	2.9%	28.4%
	Saratoga Lake	Count	11	27	59	27	15	6	145
		% within Which Source do you favor?	7.6%	18.6%	40.7%	18.6%	10.3%	4.1%	100.0%
		% within Income Bracket	47.8%	49.1%	52.7%	45.8%	36.6%	26.1%	46.3%
		% of Total	3.5%	8.6%	18.8%	8.6%	4.8%	1.9%	46.3%
	Other	Count	1	3	6	0	2	1	13
		% within Which Source do you favor?	7.7%	23.1%	46.2%	.0%	15.4%	7.7%	100.0%
		% within Income Bracket	4.3%	5.5%	5.4%	.0%	4.9%	4.3%	4.2%
		% of Total	.3%	1.0%	1.9%	.0%	.6%	.3%	4.2%
	Undecided	Count	5	11	18	17	8	7	66
		% within Which Source do you favor?	7.6%	16.7%	27.3%	25.8%	12.1%	10.6%	100.0%
		% within Income Bracket	21.7%	20.0%	16.1%	28.8%	19.5%	30.4%	21.1%
		% of Total	1.6%	3.5%	5.8%	5.4%	2.6%	2.2%	21.1%
Total		Count	23	55	112	59	41	23	313
		% within Which Source do you favor?	7.3%	17.6%	35.8%	18.8%	13.1%	7.3%	100.0%
		% within Income Bracket	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	7.3%	17.6%	35.8%	18.8%	13.1%	7.3%	100.0%

FIGURE 15: **Cross-Tabulation Between Income and Source Preference**

FIGURE 16: **Cross-Tabulation of Recreation on Saratoga Lake and Source Preference**

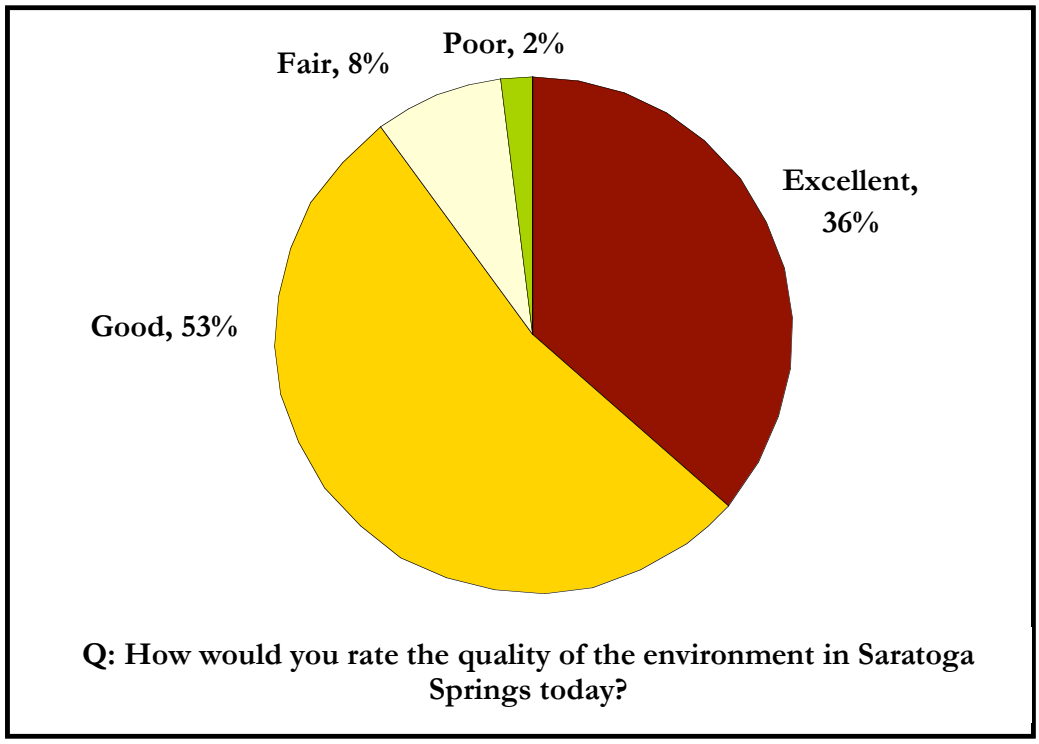
			How Often do you use SL				
			Often	Sometimes	Rarely	Never	Total
Which Source do you favor?	Hudson River	Count	25	25	19	20	89
		% within Which Source do you favor?	28.1%	28.1%	21.3%	22.5%	100.0%
		% within How Often do you use SL	49.0%	31.6%	24.1%	19.2%	28.4%
		% of Total	8.0%	8.0%	6.1%	6.4%	28.4%
	Saratoga Lake	Count	16	38	41	50	145
		% within Which Source do you favor?	11.0%	26.2%	28.3%	34.5%	100.0%
		% within How Often do you use SL	31.4%	48.1%	51.9%	48.1%	46.3%
		% of Total	5.1%	12.1%	13.1%	16.0%	46.3%
	Other	Count	3	3	4	3	13
		% within Which Source do you favor?	23.1%	23.1%	30.8%	23.1%	100.0%
		% within How Often do you use SL	5.9%	3.8%	5.1%	2.9%	4.2%
		% of Total	1.0%	1.0%	1.3%	1.0%	4.2%
	Undecided	Count	7	13	15	31	66
		% within Which Source do you favor?	10.6%	19.7%	22.7%	47.0%	100.0%
		% within How Often do you use SL	13.7%	16.5%	19.0%	29.8%	21.1%
		% of Total	2.2%	4.2%	4.8%	9.9%	21.1%
Total		Count	51	79	79	104	313
		% within Which Source do you favor?	16.3%	25.2%	25.2%	33.2%	100.0%
		% within How Often do you use SL	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	16.3%	25.2%	25.2%	33.2%	100.0%

FIGURE 17: **Recreation on Saratoga Lake**



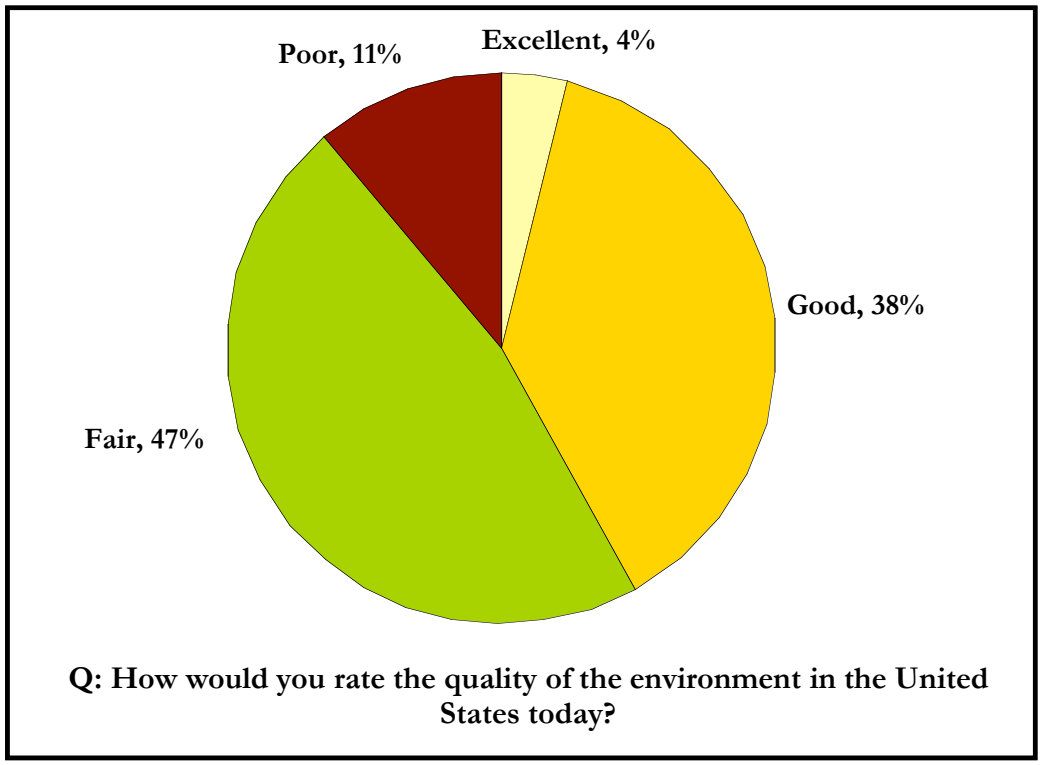
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Often	51	16.3	16.3	16.3
	Sometimes	79	25.2	25.2	41.5
	Rarely	79	25.2	25.2	66.8
	Never	104	33.2	33.2	100.0
	Total	313	100.0	100.0	

FIGURE 18: **Environmental Quality of Saratoga Springs**



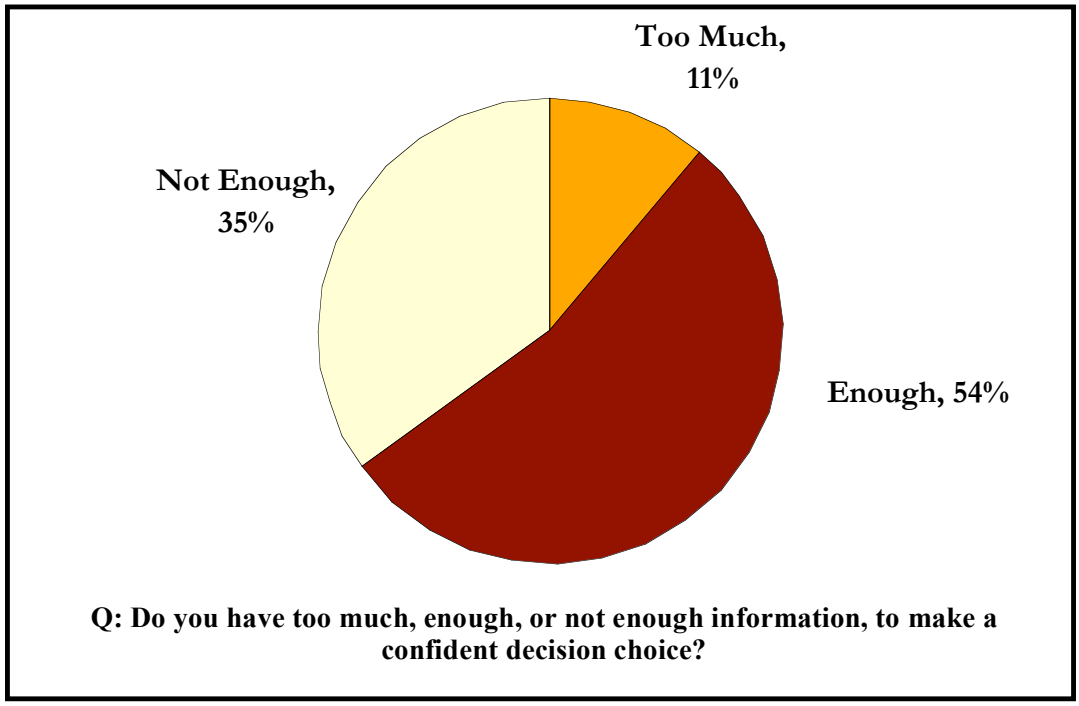
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Excellent	113	36.1	36.2	36.2
	Good	167	53.4	53.5	89.7
	Fair	25	8.0	8.0	97.8
	Poor	7	2.2	2.2	100.0
	Total	312	99.7	100.0	
Missing	System	1	.3		
Total		313	100.0		

FIGURE 19: **Environmental Quality of the United States**



		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Excellent	12	3.8	3.8	3.8
	Good	119	38.0	38.0	41.9
	Fair	148	47.3	47.3	89.1
	Poor	34	10.9	10.9	100.0
	Total	313	100.0	100.0	

FIGURE 20: **Information for Decision Confidence**



		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Too Much	34	10.9	10.9	10.9
	Enough	168	53.7	53.7	64.5
	Not Enough	111	35.5	35.5	100.0
	Total	313	100.0	100.0	

References

Blake, D.E., N. Guppy and P. Urmetzer. 1997. Canadian Public Opinion and Environmental Action: Evidence from British Columbia. Canadian Journal of Political Science / Revue canadienne de science politique **30(3):** 451-472.

Babbie, E. 1998. The Practice of Social Research. Eighth Edition. Wadsworth Publishing. Albany, NY, USA.

Doyle, T. and D. Mceachern. 1998. Environment and Politics. Second Edition. Routledge, New York, New York, USA.

Fischer, F. 2000. Citizens, Experts, and the Environment: The Politics of Local Knowledge. Duke University Press, Durham, North Carolina, USA.

Fox, W. 2003. Social Statistics: A Text Using MicroCase. Fourth Edition. Wadsworth Group, Belmont, California, USA.

Fox, W. Personal Communication. Skidmore College. 20 April 2007.

Glasgow, G. 1998. Comparing Measures of Issue Salience in a Spatial Model of Voting.

Guber, D.L. 2001. Environmental Voting in the American States: A Tale of Two Initiatives. State and Local Government Review **22(2)**: 120-32.

Guber, D.L. 2001. Voting Preferences and the Environment in the American Electorate. Society and Natural Resource **14**: 455-469.

Guber, D.L. 2003. The Grassroots of a Green Revolution: Polling America on the Environment. The MIT Press, Cambridge, Massachusetts, USA.

GSS, America's Social Survey. 1989. NORC: University of Chicago, Chicago, Illinois, USA.

Hyers, E. 2006. Why the Democrats Swept the Republicans in Saratoga Springs. Skidmore College. Saratoga Springs, New York, USA.

Kellogg, K, M. Ennis-McMillan, A. Stafford, and E. Black. 2005. Stakeholder Analysis, Skidmore College, Saratoga Springs, New York, USA.

Malnes, R. 1995. Valuing the Environment. Manchester University Press, New York, USA.

Marks, J. and C. Bergelin. 2006. Recreation, Economic Status, and Proximity to Saratoga Lake: Saratoga Springs Residents' Views of the Proposed Municipal Water Sources. Skidmore College.

Mieszkowski, K. 14 Jan 2005. Dead Movement Walking? <http://dir.salon.com/story/tech/feature/2005/01/14/death_of_environmentalism/index.html>

Post, P. 24 January 2007. AMD plan gain momentum. The Saratogian. http://www.saratogian.com Accessed 24 January 2007.

Rabe, B.G. 1994. Beyond NIMBY: Hazardous Waste Siting in Canada and the United States. The Brookings Institution, Washington D.C., USA.

Reinert, T. 24 January 2007. Handful protest company's plans. The Saratogian. http://www.saratogian.com Accessed 24 January 2007.

Ringer, J. Personal communication with anonymous survey participants, Skidmore College. April and May 2007.

Scarce, R. 2000. Fishy Business: Salmon, Biology, and the Social Construction of Nature. More Than Mere Wolves at the Door: Reconstructing Community amidst a Wildlife Controversy. Philadelphia. Temple University Press.

Shipan, C.R. and W.R. Lowry. 2001. Environmental Policy and Party Divergence in Congress. Political Research Quarterly **54(2)**: 245-263.

Shellenberger, M. and T. Nordhaus. 2004. The Death of Environmentalism: Global Warming Politics in a Post-Environmental World. www.thebreakthrough.org

Singleton, R.A Jr. and B.C. Straights. 1999. Approaches to Social Research. Third Edition. Oxford University. New York, NY, USA.

Van Liere, K.D. and R.E. Dunlap. 1980. The Social Bases of Environmental Concern: A Reviw of Hypotheses, Explanations and Empirical Evidence. The Public Quarterly **44(2)**: 181-197.

Vig, N.J. and M.E. Kraft, Eds. 2006. Environmental Policy: New Directions for the Twenty-First Century. Sixth edition. CQ Press, Washington, D.C., USA.

Yale, Elections and the Environment. 2004. Environment **46(7)**: 7-8.

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Our Families and Friends

APPENDIX A: **Survey**

1. Have you heard that Saratoga Springs is currently looking for a future drinking water source?

1. Yes
2. No

If Yes, go to question 2
If No, go to question 3

2. Which source do you favor, Saratoga Lake or the Hudson River?

1. The Hudson River
2. Saratoga Lake
3. Either one
4. Other
5. Undecided

I am going to read you several statements about the criteria for choosing a water source. Please say whether you believe the factor is very important, somewhat important, or not important.

3. Saratoga Springs should choose the drinking water source that will cost the least to local taxpayers. Would you say that this is:
--1. very important, 2. somewhat important, 3. not important, 4. don't know.

4. Saratoga should choose the source that will provide the highest quality drinking water. Would you say that this is:
--1. very important, 2. somewhat important, 3. not important, 4. don't know.

5. Saratoga should choose the source that will ensure local control over the water source. Would you say that this is:
--1. very important, 2. somewhat important, 3. not important, 4. don't know.

6. Saratoga should choose the source that will reduce the likelihood of development. Would you say that this is:
--1. very important, 2. somewhat important, 3. not important, 4. don't know.

7. Saratoga should choose the source that will preserve the use of Saratoga Lake as a recreational resource. Would you say that this is:
--1. very important, 2. somewhat important, 3. not important, 4. don't know.

8. How often do you use Saratoga Lake for recreational purposes?
1. Often
2. Sometimes
3. Rarely
4. Never

9. If you had to choose which one should be most important factor, would it be
1. cost
2. quality
3. local control
4. impact on development
5. preserving Saratoga Lake as a recreational resource.

10. Which of the following statements best summarizes your views?
1. There is so much information in the media that I don't know what to pick for the Saratoga water source.
2. I have enough information about what to pick for the Saratoga water source.
3. There is not enough information for me to decide what to choose for the Saratoga water source.

11. Generally, where do you get your news and information about the future drinking water source for Saratoga Springs?
1. Television news programs
2. Newspaper
3. Internet
4. Friends, family, or co-workers
5. Others (specify)
6. Don't get info about water debate
7. Don't know
8. Refused

12. In 2005, Saratoga Springs changed how it bills residents for drinking water so that people who use more water, pay more. Has your water bill

1. increased
2. decreased
3. stayed the same
4. don't know

How would you rate the quality of:

13. The environment in Saratoga Springs today –1. excellent, 2. good, 3. only fair, 4. poor

14. The environment in the United States today. –1. excellent, 2. good, 3. only fair, 4. poor

15. How important to you, personally is the environment? Would you say it is the most important, very important, somewhat important, or not very important?

1. most
2. very
3. somewhat
4. not very important

16. How important a factor is a candidate's stance on drinking water when you vote in local elections? Would you say it is a major factor, a minor factor, or not a factor at all?

1. Major factor
2. Minor factor
3. Not a factor

17. When it comes to politics, do you generally think of yourself as a,

1. Strong Democrat
2. Lean Democrat
3. Independent
4. Lean Republican
5. Strong Republican

18. How long have you lived in Saratoga Springs?

Record actual number

19. What is the last grade of formal education you have completed?

1. 8th
2. 9th
3. 10th
4. 11th
5. 12th
6. 1 year of college
7. 2 years of college
8. 3 years of college
9. 3 years of college
10. College graduate
11. Post graduate

20. Now, I don't want to know your exact income, but just roughly could you tell me if your annual house income before taxes is:

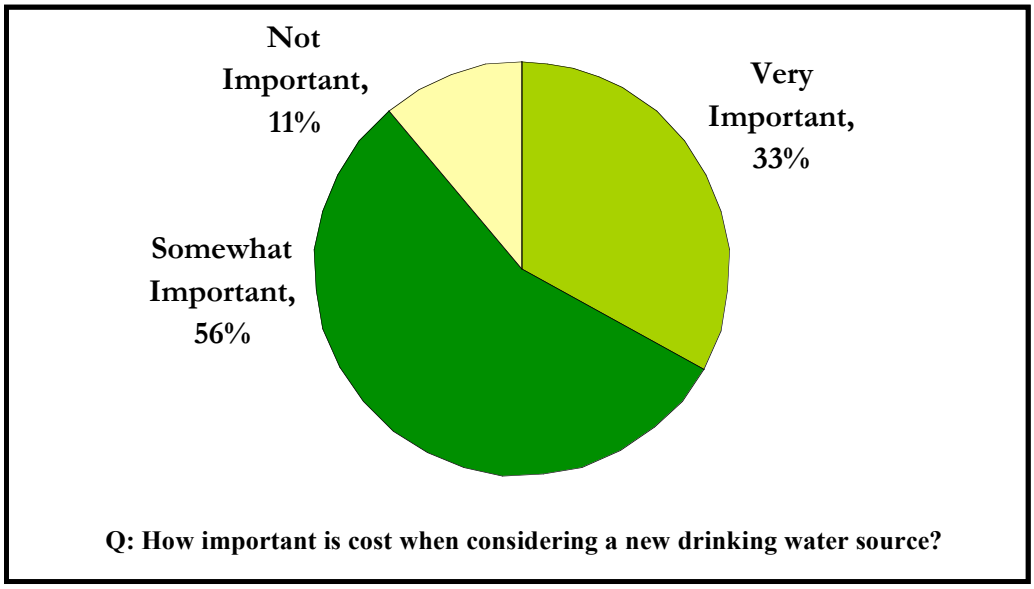
1. below $25,000
2. $25- 50,000
3. $50-100,000
4. $100-150,000
5. $150,000 +
6. Refused

21. Lastly, in what year were you born? _____

22. Gender is assumed

APPENDIX B: **Frequencies and Charts of Survey Answers**

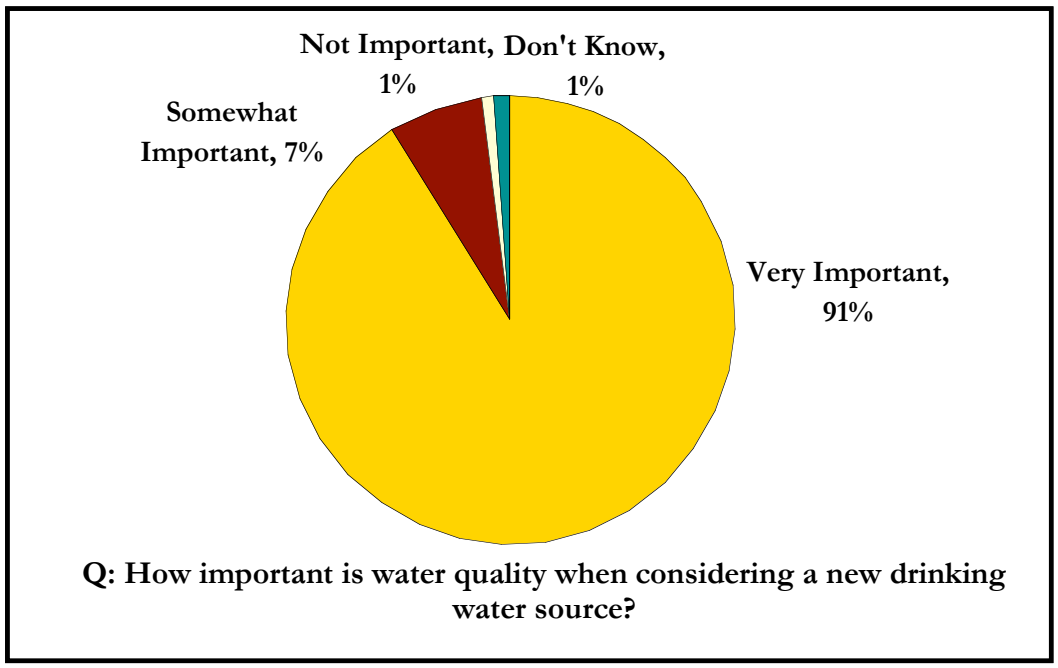
Question 3



Q: How important is cost when considering a new drinking water source?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Important	103	32.9	32.9	32.9
	Somewhat Important	175	55.9	55.9	88.8
	Not Important	33	10.5	10.5	99.4
	Don't Know	2	.6	.6	100.0
	Total	313	100.0	100.0	

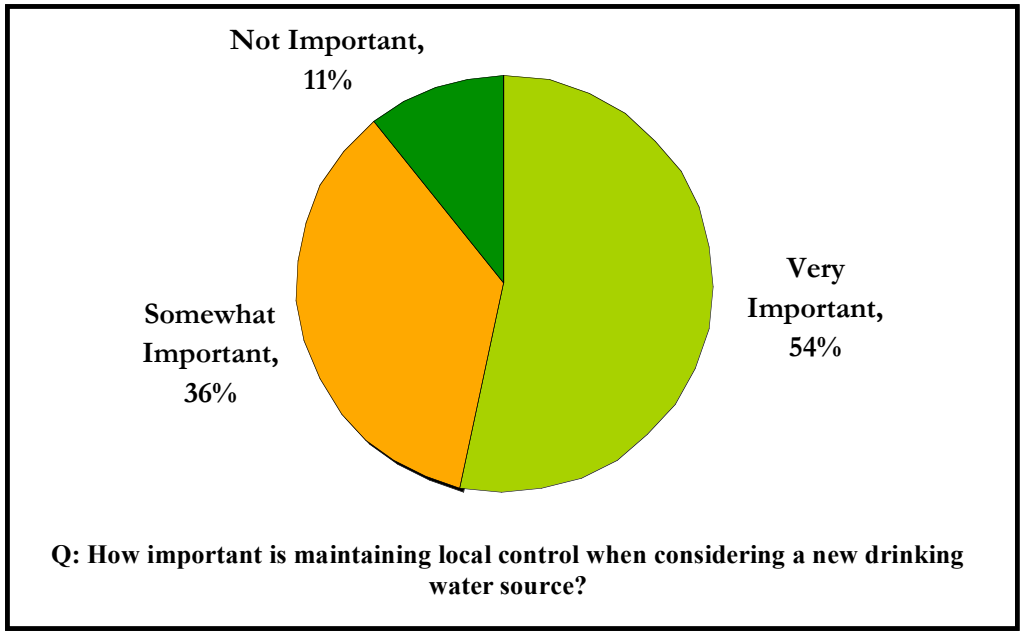
Question 4



		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Important	286	91.4	91.4	91.4
	Somewhat Important	21	6.7	6.7	98.1
	Not Important	3	1.0	1.0	99.0
	Don't Know	3	1.0	1.0	100.0

	Total	313	100.0	100.0	

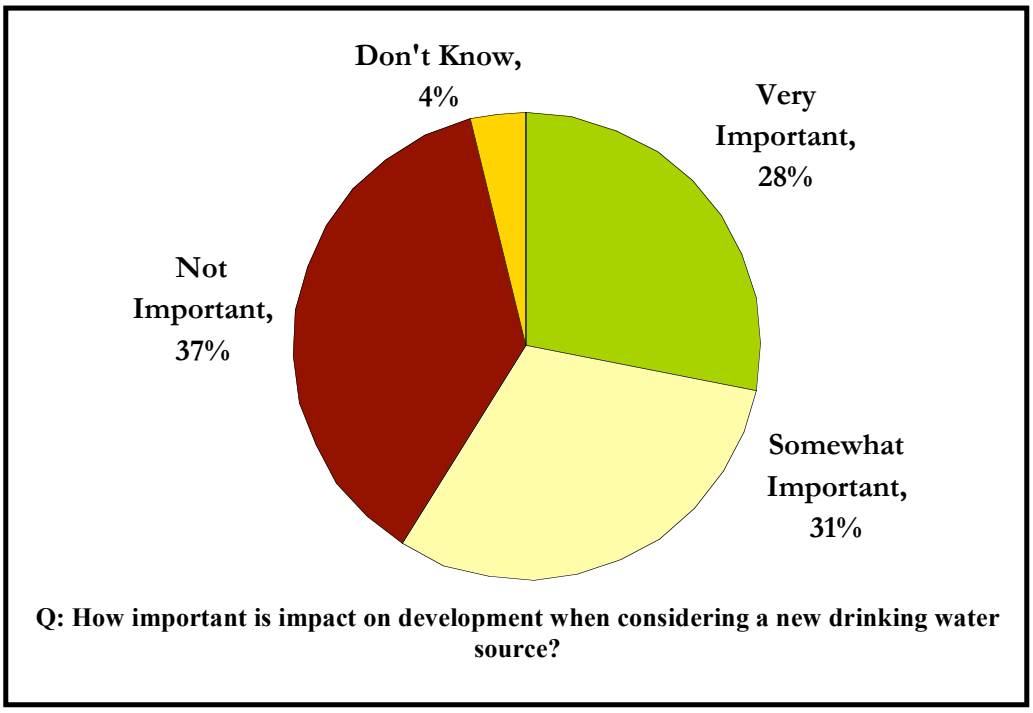
Question 5



		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Important	168	53.7	53.7	53.7
	Somewhat Important	111	35.5	35.5	89.1
	Not Important	33	10.5	10.5	99.7
	Don't Know	1	.3	.3	100.0

	Total	313	100.0	100.0	

Question 6

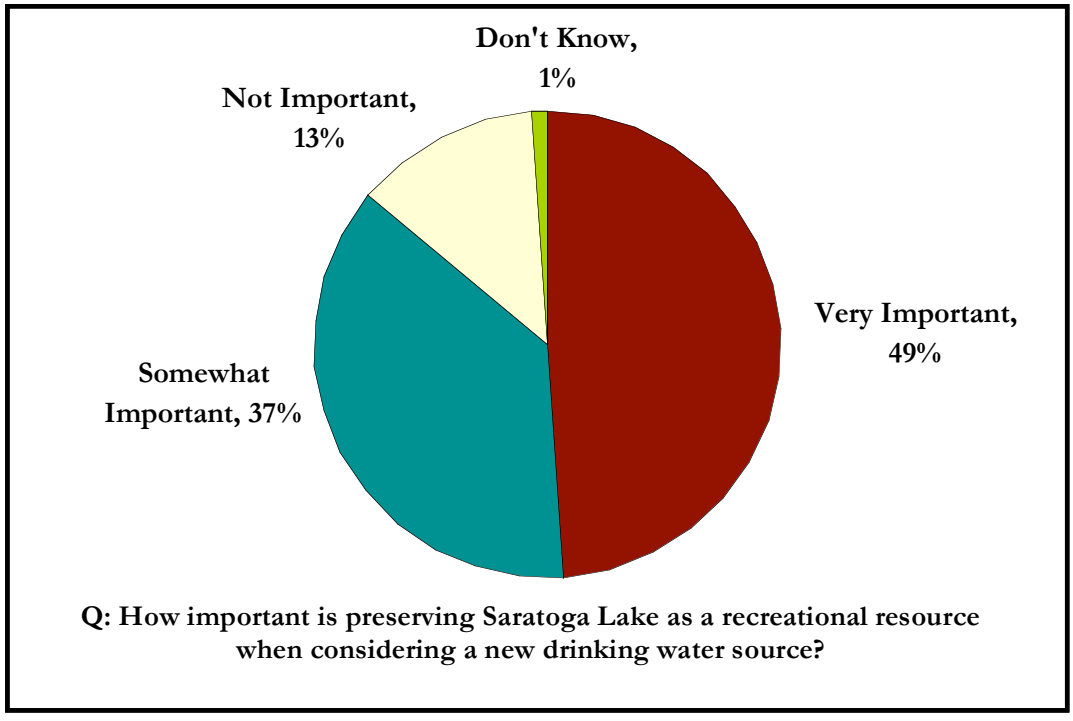


Q: How important is impact on development when considering a new drinking water source?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Important	88	28.1	28.1	28.1
	Somewhat Important	98	31.3	31.3	59.4

	Not Important	116	37.1	37.1	96.5
	Don't Know	11	3.5	3.5	100.0
	Total	313	100.0	100.0	

Question 7

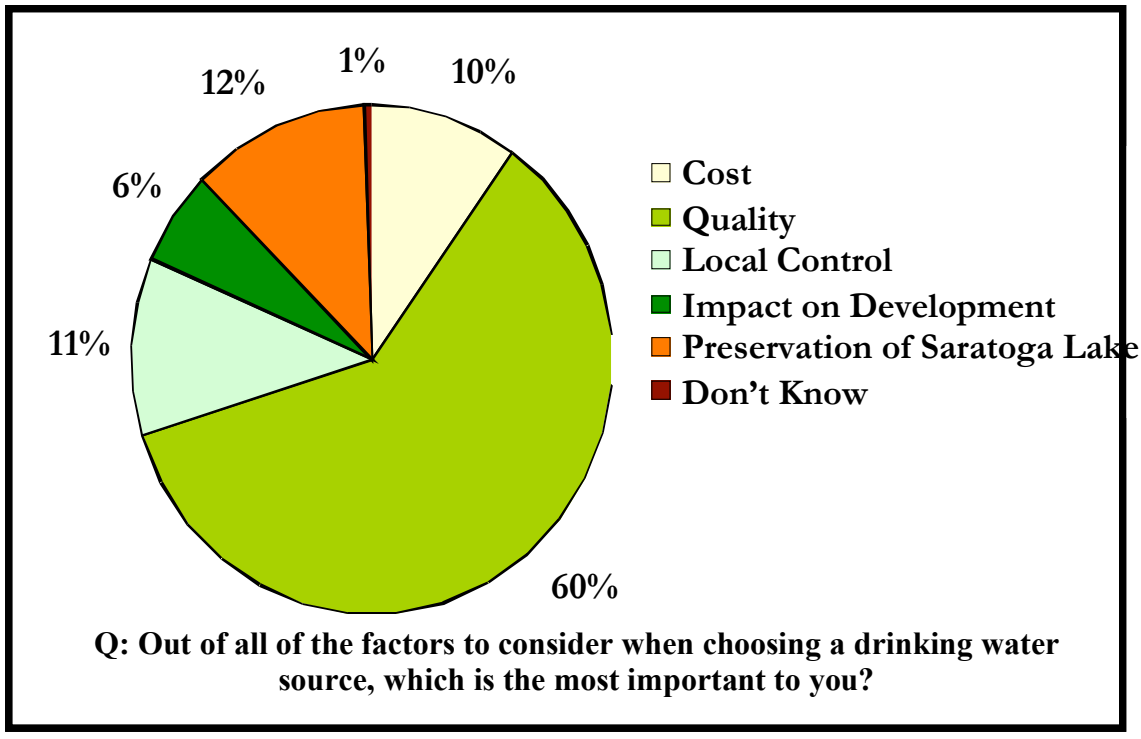


Q: How important is preserving Saratoga Lake as a recreational resource when considering a new drinking water source?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Important	153	48.9	48.9	48.9

	Somewhat Important	115	36.7	36.7	85.6
	Not Important	40	12.8	12.8	98.4
	DK	5	1.6	1.6	100.0
	Total	313	100.0	100.0	

Question 9

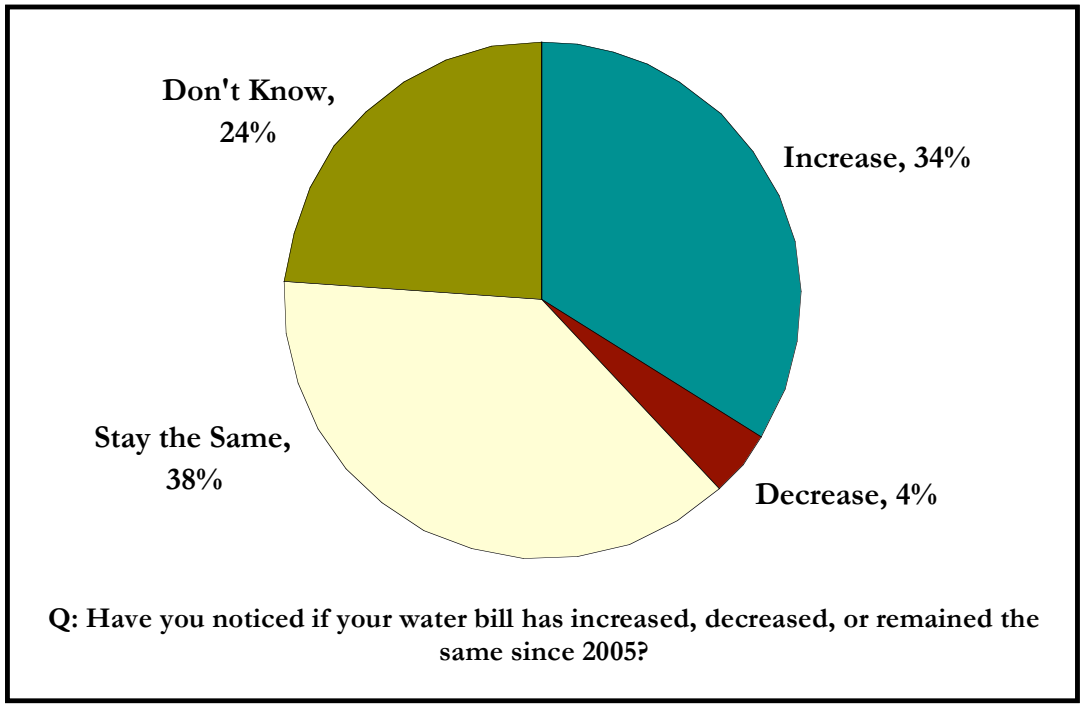


Q: Out of all of the factors to consider when choosing a drinking water source, which is the most important to you?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Cost	31	9.9	9.9	9.9

	Quality	190	60.7	60.7	70.6
	Local Control	33	10.5	10.5	81.2
	Development	20	6.4	6.4	87.5
	Preserve SL	37	11.8	11.8	99.4
	DK	2	.6	.6	100.0
	Total	313	100.0	100.0	

Question 12

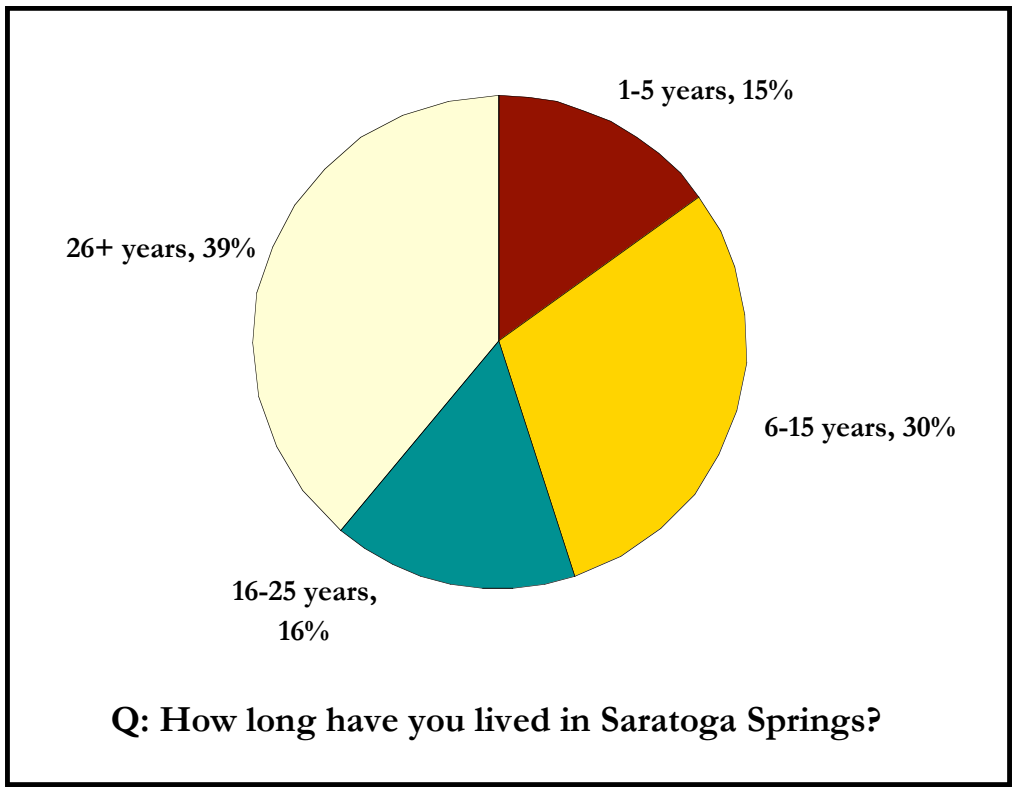


Q: Have you noticed if your water bill has increased, decreased, or remained the same since 2005?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Increase	105	33.5	33.5	33.5
	Decrease	14	4.5	4.5	38.0

Stay the Same	120	38.3	38.3	76.4
DK	74	23.6	23.6	100.0
Total	313	100.0	100.0	

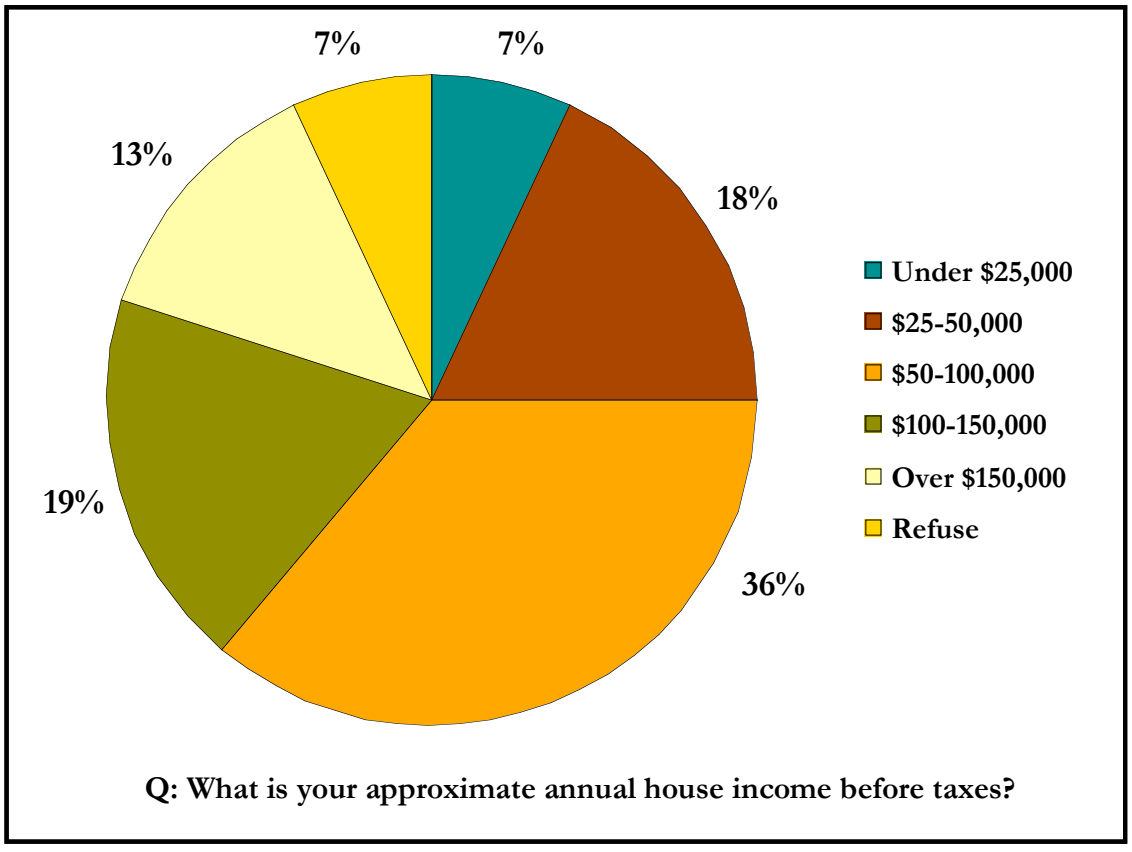
Question 18



Q: How long have you lived in Saratoga Springs?

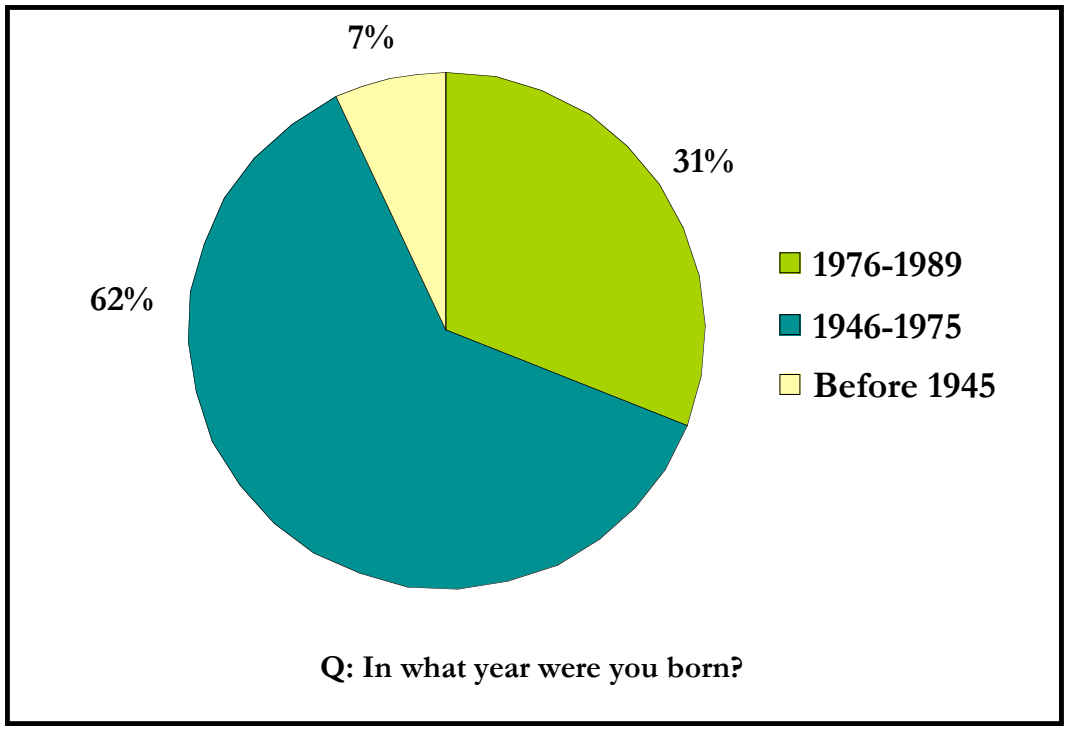
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1-5 years	48	15.3	15.3	15.3
	6-15 years	93	29.7	29.7	45.0
	16-25 years	51	16.3	16.3	61.3
	26+ years	121	38.7	38.7	100.0
	Total	313	100.0	100.0	

Question 20



		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Under $25,000	23	7.3	7.3	7.3
	$25-50,000	55	17.6	17.6	24.9
	$50-100,000	112	35.8	35.8	60.7
	$100-150,000	59	18.8	18.8	79.6
	Over $150,000	41	13.1	13.1	92.7
	Refuse	23	7.3	7.3	100.0
	Total	313	100.0	100.0	

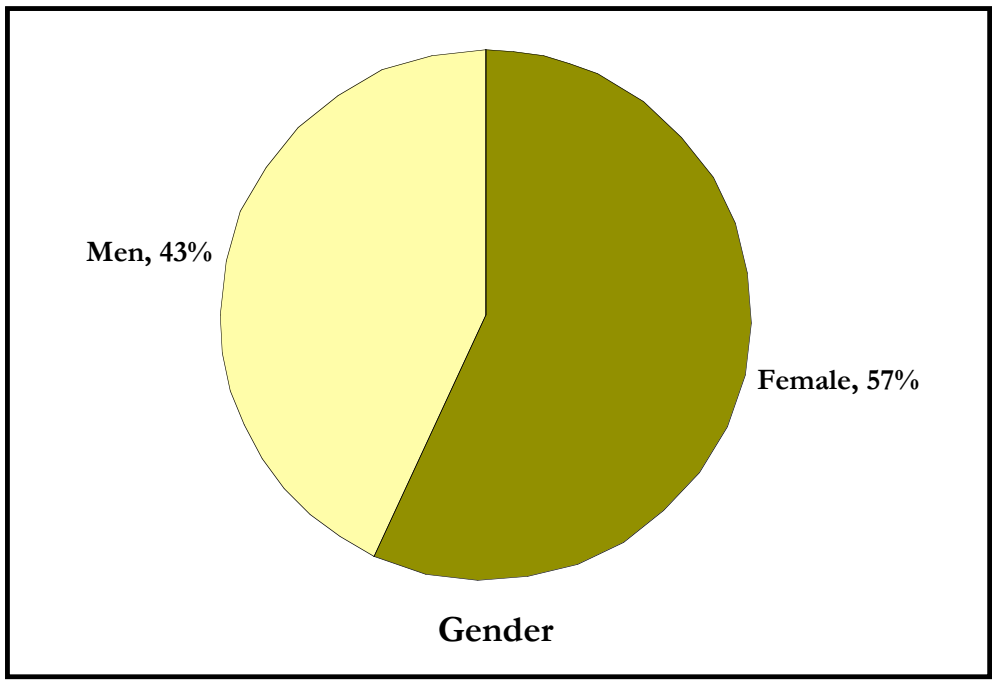
Question 21



	Frequency	Percent	Valid Percent	Cumulative Percent

Valid	1917-1945	98	31.3	31.3	31.3
	1946-1975	193	61.7	61.7	93.0
	1976-1989	22	7.0	7.0	100.0
	Total	313	100.0	100.0	

Assumed



		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Female	179	57.2	57.2	57.2

Men	134	42.8	42.8	100.0
Total	313	100.0	100.0	

APPENDIX C: **Raw Data**

1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**
1	2	1	1	1	1	2	3	2	2	2	1	2	3	1	1	1	37	9	4	1945	1
1	2	1	1	1	2	2	4	3	2	5	1	2	2	1	1	1	32	10	4	1948	1
1	1	2	1	2	2	1	4	2	2	2	3	2	3	2	2	5	50	10	2	1921	2
1	5	2	1	1	3	1	2	2	1	2	3	1	2	2	2	4	35	10	4	1948	1
1	2	2	1	1	2	1	3	2	2	2	1	1	3	2	2	3	18	9	3	1965	2
1	2	3	4	1	4	3	4	3	2	5	3	1	3	3	3	2	10	10	1	1943	2
1	2	1	4	1	1	1	4	3	3	2	3	1	4	1	1	1	30	10	3	1949	1
1	2	1	1	1	1	1	3	1	3	2	1	3	2	2	2	4	59	10	3	1947	1
1	2	1	1	1	1	1	3	1	3	2	1	2	3	2	2	4	32	10	2	1956	2
1	2	2	1	1	2	1	2	2	2	5	1	1	2	2	1	2	23	9	3	1937	1
1	4	3	1	1	3	2	1	1	2	5	1	1	3	2	2	5	8	7	5	1961	1
1	2	2	1	1	2	3	3	2	2	2	3	2	2	3	1	4	11	5	2	1952	1
1	1	1	1	2	2	1	1	2	1	2	3	2	3	2	2	2	6	10	3	1957	1
1	1	1	1	1	2	2	3	2	1	2	3	2	3	2	2	2	6	9	4	1964	1
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1	1	2	1	2	3	1	1	5	2	4	3	1	2	2	1	4	1	10	5	1967	1
1	2	2	1	1	2	1	3	2	3	2	1	2	2	2	2	3	4	10	3	1969	1
1	4	3	1	1	3	2	1	1	2	5	1	1	3	2	2	5	8	7	5	1961	1
1	2	2	1	1	2	3	3	2	2	2	3	2	2	3	1	4	11	5	2	1952	1
1	1	1	1	2	2	1	1	2	1	2	3	2	3	2	2	2	6	10	3	1957	1

1	1	1	1	1	2	2	3	2	1	2	3	2	3	2	2	2	6	9	4	1964	1
1	2	3	1	1	3	1	3	2	3	2	1	2	2	2	1	3	42	10	6	1923	2
1	1	2	1	2	3	1	1	5	2	4	3	1	2	2	1	4	1	10	5	1967	1
1	2	2	1	1	2	1	3	2	3	2	1	2	2	2	2	3	4	10	3	1969	1
1	2	2	1	1	4	2	3	2	2	2	1	1	3	1	1	2	18	10	2	1923	2
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